

CAUSE

*From Hearts to Hands:  
Let's DO Something*





## Unit Plan Overview: LIVING MDG 8

Subject: Leadership/Public Engagement

Unit Title: From Heart to Hands: Let's DO Something!

Number of Lessons: 9

Time: approx 45 minutes/lesson

Description: In this mini-unit, students will engage in an “Apprentice-like” experiential leadership activity which will teach them about key aspects of leadership. Although the unit has a basic structure, flexibility will be maintained to allow for inclusion of student talent and interest. Emphasis is on student initiative and ingenuity; the teacher is to act as a facilitator and guide.

Rationale: What better way to teach leadership than to let students try their hands at leading? The structure of this unit allows students to work within the whole group, in small groups, and individually in order to complete smaller tasks towards the campaign. There is room for student choice, and tasks will be assigned based on individual talents and outcomes of the leadership inventory done in the introductory class.

Curricular Connections:

*Language Arts* 3.4 : Use appropriate visual, print and/or media effectively to inform and engage the audience.

4.1: Enhance artistry by experimenting with figurative language and illustrations to create visual images, provide emphasis or express emotion.

5.2: Contributing in group situations, by asking questions and building on the ideas of others, assisting in setting and achieving group goals by inviting others to speak, suggesting alternatives...and listening to a variety of points of view.

: Evaluate group process and personal contributions according to pre-established criteria to determine strengths and areas for improvement.

*Social Studies Strands*

a) *Power, Authority and Decision Making*

- a critical examination of the distribution, exercise and implications of power and authority
- examine justice and laws, fairness and equity, conflict and cooperation
- promotes active and responsible citizenship

b) *Economics and Resources*

- explores multiple perspectives on the use, distribution and management of resources and wealth
- explores the effects that economics and resources have on quality of life around the world

c) *Global Connections*

- develops students' understanding of citizenship and identity and the interdependent or conflicting nature of individuals, communities, societies and nations. Exploring this interdependence broadens students' global consciousness and empathy with world conditions
- better comprehension of sustainability and universal human rights

Objective(s):

- Students will acquire knowledge of self and others through contributing to school's positive environment
- Students will develop organizational skills through participation in school-based activities
- Students will develop leadership skills while preparing school-wide activities
- Students will become active global citizens
- Students will use knowledge to initiate an action project

Breakdown

#	Focus	Concepts/Skills to be Introduced
1	Introduction: Leadership Styles	How to use self-assessment to be effective in leadership, characteristics of a good leader
2	Exploring Poverty and the MDGs	Looking at what is being done and what still needs to be done in order to eradicate extreme poverty
3	Creating a CAUSE	How to merge needs and passions and develop a project that will fit into both
4	Goal Setting	How to create reachable goals for the project/campaign
5	Making a Plan: What Are We Doing?!	How to make lists, prioritize details, establish boundaries for a project
6	Marketing: Getting the Word Out	What constitutes effective advertising (posters, press releases). Begin work on marketing products.
7	Public Speaking: How To Present	Presentation skills: volume, pitch, rate, projection, phrasing, intonation, beginning to create presentations. (Enrichment: Letters to teachers to request time to present)
8	Campaign/Project Day!	Follow-through on plans
9	Celebration of Accomplishments; Self-evaluation; Reflection	Value of self-evaluation and reflection

Student Activities

- 1) Complete Personality/Leadership Inventory
- 2) Brainstorm list of 'to do' activities for Campaign
- 3) Goal Setting Assignment (optional)
- 4) List what makes effective advertising; browse media and provide examples
- 5) Marketing Product: Poster/ Press Release
- 6) Evaluating good vs. poor public speaking practices, beginning to develop presentations/announcements
- 7) Designing and presenting a short (5 minutes or less) presentation/announcement
- 8) Self-Evaluation and Reflection Chart

Extension/Enrichment:

- Creating additional posters for marketing
- Writing letters to teachers, requesting time to present in classrooms
- Contacting local radio stations regarding promotion
- Completing additional presentations to classrooms

### Resources and Materials

- computers
- poster paper, craft supplies
- Guest Speakers (from media-news/newspaper/radio, from NGO, etc...)
- example press releases
- Leadership & multiple intelligence surveys
- Websites:
  - o [www.topachievement.com/smart.html](http://www.topachievement.com/smart.html) (SMART goals)
- Various handouts (presentation skills, advertising techniques, schedules, etc...)

### Instructional Techniques

<i>Grouping</i>	<i>Strategies</i>
Whole Group	guest speakers, direct instruction, discussion, cooperative learning, problem-solving exercises, literature connection
Small Groups	projects/assignments, technology integration, brainstorming, presentations, cooperative learning
Individual	projects/assignments, metacognitive activities, leadership inventory

### Introductory Activities

- Leadership Inventory & Multiple Intelligences Survey
- Defining Leadership, Kindness Campaign

### Closing Activities

- Celebration of Accomplishments
- Self Evaluation
- Reflection

### Sample Evaluation Procedures

1	Attendance	30%	Teacher List
2	Teacher Evaluation: Attitude and Effort	25%	Grade (/5) for each class
3	Self Evaluation	10%	Form
4	Goal-Setting Assignment (deleted because of time restraints)	5%	Checklist
5	Marketing Product (press release/poster)	15%	Rubric
6	Presentation Skills	10%	Rubric
7	Reflection Chart	5%	Key
		100%	

## Lesson Plan

Subject: Leadership/Public Engagement

Lesson: 1 of 9

**Grades:** 6-9

**Unit:** From Heart to Hands: Let's DO Something!

**Time:** 45 minutes

**Materials:** Leadership surveys/multiple intelligence surveys

**Objectives:** The student will determine personal skills, talents and areas for improvement and will demonstrate awareness of how his/her individual skills will facilitate the leadership project.

**Introduction:** (5-7 minutes)

- 1) Hand out project overviews.
- 2) Explain project to students: get to create own public awareness/fundraising campaign! It is a completely student-led (teacher as facilitator) process—students make the decisions and do the work!
  - Brief calendar, explain each day, parts of process, student role in process

**Body:** (35-40 minutes)

- 1) Brainstorm qualities of a good leader.
- 2) Hand out Leadership Survey and explain: need to read each question and rate yourself, then total up the # of 5's, 4's, etc...and add those up for a total number.
  - *Early finishers can write a paragraph about their biggest strengths/weaknesses.*
- 3) When all students are finished, read 'results,' and ask students what is their biggest strength/what they think they could most improve. Have them list these on the back of their surveys (will use in goal-setting class).
- 4) Hand out Multiple Intelligences Survey and explain: rate each sentence from 0-4, can use numbers more than once (refer them to 'key' for ratings). When finished, they add up all the points for A, B, etc..., and circle the letter that has the most points.
- 5) When all students are finished, read 'results.' (Have each category up on the board, and put tally marks for how many students fall into each category.)
- 6) Ask students what we can do with these results: what do they mean for this project? Tell students about choices in project, and fitting in where your skills match: poster vs. press release, etc...
- 7) Ask students to brainstorm how *their* intelligence could be used in the project.
- 8) Tell students to put both surveys in binder, because we will be using them later on.

**Closure:** (1 minute)

Encourage students to go home, brainstorm, and write down any ideas for a campaign.

**Sponge:**

**\*\*Emphasize that we do not always need to come up with brand new ideas, but sometimes we need to fit ideas to what works for us.**

- 1) Have students get into small groups and brainstorm vision: ask them to use a piece of looseleaf/scrap paper and to write down every idea they have: names, ideas, catchphrases, what they want it to look like, who they want involved, how to do that, etc...

**Evaluation:**

- Student completion of surveys, student discussion/paragraphs about strengths, weaknesses, and how to use talents in project.

## Lesson Plan

Subject: Leadership/Public Engagement

Lesson: 2 of 9: Exploring the MDGs and Poverty

**Grade:** 6-9

**Unit:** From Heart to Hands: Let's DO Something!

**Time:** 45 minutes

**Materials:** (optional) CAUSE staff person for workshop, website/projector to show videos.

**Unit Background:** Students have been introduced to the project and have completed several surveys to determine strengths/weaknesses.

**Objectives:** The student will be exposed to different development projects.  
The students will explore the MDGs.

**Introduction:** (5-7 minutes)

1. Play the video World on Fire (<http://www.worldonfire.ca/>).

**Body:** (30-35 minutes)

- 1) Ask about what we can do to help people around the world. Look at CAUSE website ([www.cause.ca](http://www.cause.ca)) as well as other NGOs.
- 2) Look at the MDGs (<http://www.mdgmonitor.org/>). Talk about the different faces of poverty (health/sanitation, access to opportunity, environment, maternal health...)
- 3) **\*\*For this, you have the option of contacting staff at CAUSE Canada ([info@cause.ca](mailto:info@cause.ca)) and having a CAUSE staff member come and do an interactive workshop with your class about the MDGs and Poverty\*\***
- 4) **\*\*Focus specifically on MDG 8—what does it mean to be a global citizen? How does this project connect to this MDG?**

**Closure:** (3 minutes)

Play imbalanced musical chairs

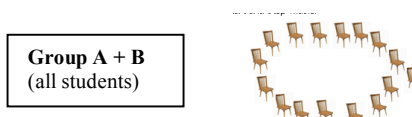
- Divide students into 2 groups: one group of 3 (Group A) and one group with the rest of the students (Group B).
- Arrange the classroom chairs into 2 sets of circles. Have ALL the chairs (except 3) moved into one circle, and have 3 chairs in another circle.
- Put Group A with the large circle of chairs, and put Group B with the 3 chairs.
- Explain the 'new' rules of musical chairs: students must stay with their groups and circle around the chairs while the music plays. When the music stops, they must find a spot (however, more than one person can sit on the same chair)
- Start and stop music.
- Take away a chair from Group B and give it to Group A. Continue playing. Keep taking chairs until B only has one chair left.



- Now, rearrange the chairs so that there is one big circle. Combine groups A and B. Play the game again. Start and stop the music.



- Discussion: How did you feel in this game? Was it fair? why/why not? There is enough food in the world for everyone to eat, but 800 million people go hungry every day. Why is this? What are we doing that with what we have?



## Lesson Plan

Subject: Leadership/Public Engagement

Lesson: 3 of 9: *Creating a CAUSE: What kind of project do we want?*

**Grade:** 6-9

**Unit:** From Heart to Hands: Let's DO Something!

**Time:** 45 minutes

**Materials:** computer/projector for video at closure.

**Unit Background:** Students have been introduced to the project and have completed several surveys to determine strengths/weaknesses.

**Objectives:** The student will contribute ideas about project.

The student will use logic and reasoning to choose appropriate ideas for project.

**Introduction:** (5-7 minutes)

- 1) Review what students learned about poverty. Ask students for suggestions about the 'best' way to eliminate poverty \*\*can reference discussion on the MDGs in CAUSE workshops. Students might include ideas like (roads, water, health care, education, shelter, etc...). Explain that there is no one answer, that different people view different things as being more important to eliminate poverty.
- 2) Ask students to brainstorm/contribute that they're passionate about—write on board. Have students also pair idea with a reason for WHY they think that idea is the best way to reduce extreme poverty.

**Body:** (30-35 minutes)

- 1) With the whole group, choose (voting, other method) one of the ways suggested by the students. Explain that they will choose one method of eliminating poverty, and that THAT is what the project will be centered on.
- 2) After method is chosen, the second stage of brainstorming begins. There are different kinds of projects that can be created: awareness, fundraising, or some combination of the two. Have students begin to think of ideas (perhaps in small groups, then shared in a larger group setting) about what kind of event they want to have (how they are going to make the public aware that this is an issue? What kind of event/public engagement can be done to communicate this?)
- 3) After ideas have been shared, discuss with class. Together, choose/merge ideas to a project that is manageable (but that students are passionate about).
- 4) Introduce the idea of needing a catchy slogan/name for our campaign: begin brainstorming in small groups (put guiding questions on board: what rhymes with kind, alliteration, association, imagery, length, etc...). Encourage open brainstorming: no right answer, often first answer isn't best one...

**Closure:** (3 minutes)

Watch a video about how children CAN make a difference (example:

<http://ca.youtube.com/watch?v=6Sb6RmRMbBY> -6:41minutes)

**Evaluation:** (Observation)

- Brainstorming ideas, logic of thought



## Lesson Plan

Subject: Leadership/Public Engagement

Lesson: 4 of 9

**Grade:** 6-9

**Unit:** From Heart to Hands: Let's DO Something!

**Time:** 45 minutes

**Materials:** Goal-Setting checklists

**Unit Background:** Students have been introduced to the project, brainstormed ideas and have completed several surveys to determine strengths/weaknesses.

**Objectives:** The student will list qualities of an effective goal.

The student will create his/her own goals, both personally and in relation to the project.

**Introduction:** (5-7 minutes)

- 1) Have students make a list of 3 things that they want to accomplish in their lives. Have them share their goals with students around them.
- 2) Tell students that we're going to learn how to make effective goals—goals that we can meet and follow through on.

**Body:** (30-35 minutes)

- 1) With the whole group, ask students to list things that would make a goal effective—write ideas on board.
- 2) Introduce concept of SMART goals: write acronym on board. Tell students about each part of SMART, using examples and having students 'fix' goals to make them fit into specific criteria. (Have students copy what is being written down onto a piece of looseleaf).
- 3) Divide students into small groups. Hand out *Goal-Setting Checklist* and pass the stapler around: have students staple the checklist to their assignment.
- 4) Tell students to use a separate piece of looseleaf to write at least three goals for themselves (mandatory: one related to the project; the others can be unrelated), and to ensure that they are: **s**pecific, **m**easurable, **a**ttainable, **r**ealistic and **t**imely.
- 5) To help students brainstorm 'project' goals, refer back to different skills that will be learned (presentation, marketing, design, action, etc...)
  - *Early Finishers can pair up and peer-edit goals to make sure that they fit the criteria.*

**Closure:** (3 minutes)

Have students volunteer to read goals to the class; read own goal(s) to class. Have class give feedback for each of the SMART criteria: one student volunteer up at board with marker, and class can tell him/her when to check one off and why.

**Evaluation:**

- Goal-setting Assignment (checklist)
- Group discussion

## Lesson Plan

Subject: Leadership/Public Engagement

Lesson: 5 of 9

**Grades:** 6-9

**Unit:** From Heart to Hands: Let's DO Something!

**Time:** 45 minutes

**Materials:** poster board calendar, smaller copies of calendar.

**Unit Background:** students have done self-awareness exercises and come up with ideas for their project. They have also learned about goal-setting.

**Objectives:** The student will list and prioritize items that need to be completed in the project.

The student will contribute to the group process by demonstrating compromise and openness to new ideas.

### Body

- 1) Ask what is the first thing that a group does when they are given a task? (Decide what it's all about)—the same goes for us—when beginning a project, we need to act like newspaper reporters and cover all of the 5 W's (ask students to volunteer what they are: who, what, where, when, why, how...)
- 2) Have students write these categories in their binders as well as the following ideas:
- 3) Using these categories, start brainstorming rules and boundaries. Get students to think of the *details* (who: (obvious answer=us)...but who for, who can participate, etc...)
- 4) Ask students to refer to blank schedule. Begin to brainstorm a list of all the things 'to do' throughout the project in order for it to come together.
- 5) Prioritizing lists: there will be a lot of details: what are the 'musts', the 'should dos', and the 'if we have time' items? Have student volunteer to come up to the board and color/symbol code the items.
- 6) Put up large calendar, hand out smaller copies. Referring to schedule, plan when these details must be done in order for the next steps to take place.

**Closure:** (3 minutes)

- Have students color code items on calendar (can be divided by who is doing what, how urgent something is, etc...)

**Evaluation:**

- Group list(s)

## Lesson Plan

Subject: Leadership/Public Engagement

Lesson: 6 of 9: *Marketing: Getting the Word Out*

**Grade:** 6-9

**Unit:** From Heart to Hands: Let's DO Something!

**Time:** 45 minutes + (need time to work on products)

**Materials:** Press Release worksheet/Advertising worksheet

Rubrics for marketing products/press releases & short presentations

**Unit Background:** Students have been introduced to the project, have completed surveys to determine strengths/weaknesses, have chosen the names and details of project and learned how to set 'good' goals.

**Objectives:** The student will decide upon boundaries for the campaign.  
The student will apply effective marketing techniques to product (press release/presentation/poster).

**Introduction:** (5 minutes)

1. Ask students how they find out that something is happening? What are different ways to 'market'?
2. Review multiple intelligences, and tell students they will have a choice to be involved in different parts of the marketing portion.

**Body:** (30-35 minutes)

- 1) Hand out Press Release sheet and go over. Read a sample press release—have students highlight the answers to the 5Ws.
- 2) Discuss posters. We must be intentional in our advertising techniques as well—ask students if they know that certain colors give off different feelings:
- 3) Hold up different colors of paper, ask students what kinds of things they think that those colors might evoke—
- 4) Hand out Advertising Sheet, go over other elements (shape, line, words, size, neatness). Ask for student volunteers to read.
- 5) Ask students to turn page over and look at article about advertising. Read key points to students—help them to understand that intentionality is important in sign design.
- 12) Ask who would prefer to do press release, presentation write-up (to be presented later) or poster (remind of multiple intelligences)—words people, press release, etc... Of course, if neither of those 'fit' into your intelligence, it's always good to be stretched—we can't always just do things that we're comfortable with!
- 13) Assign people to products—can work in partners.
- 14) Go over marking scheme/rubric for each product.

**Closure:**

Ask students if they can think of any other ways to get the word out—what can they do during the day when they're interacting with other students?

**Evaluation:**

Student discussion

Beginning of application of marketing ideas

Grade on marketing product

## Lesson Plan

Subject: Leadership/Public Engagement

Lesson: 7 of 9: *Public Speaking: How To Present*

**Grades:** 6-9

**Unit:** From Heart to Hands: Let's DO Something!

**Time:** 45 minutes + time for actual presentations

**Materials:**

Rubrics for presentation skills

Presentation worksheets

\*\*will need to have arranged with other teachers for students to present in their classrooms for 3-5 minutes

**Unit Background:** Students have been introduced to the project, have completed surveys to determine strengths/weaknesses, have chosen the names and details of project, and have completed press releases and posters to market the campaign.

**Objectives:** The student will understand and apply effective presentation skills to promote their campaign.

The students will effectively exercise 'sandwich' feedback skills.

**Introduction:** (5 minutes)

- 1) Ask students what makes someone a good public speaker—what do you like and not like when someone is giving a speech? List.

**Body:** (30-35 minutes)

- 1) Tell students that they'll have a chance to do some public speaking for this project. But first, they need to know what they'll be marked on (some of the things from their list!)
- 2) Hand out presentation rubrics—tell students that they will have a chance to give the TEACHER marks, so they need to know what's on there!  
→ *posture and eye contact*  
→ *enthusiasm*  
→ *voice usage*
- 3) Give sample presentation (2 minutes)—with a lot of things WRONG.
- 4) Teach students about SANDWICH method of criticism: one thing that was great, one thing that could use improvement, one thing that was great.
- 5) Have students tell you what mark you would get and WHY...what could be improved? Have them practice the sandwich technique—encourage them to be specific with their praise.
- 6) Have students each write a short paragraph about themselves (write specific questions on board): what is my name, what is my favorite sport/hobby, what are 3 words that I would use to describe myself, and where would I travel if I could go anywhere, etc...?
- 7) Tell students that they will be presenting these paragraphs to practice public speaking—and our class will evaluate them according to the rubric, and give them feedback with the SANDWICH.
- 8) Give students 3 minutes to write.
- 9) Divide students into 2 groups, and have each group (of 3-4) present to each other and give the same feedback they gave me after each.
- 10) Group students into partners; give each group a short presentation (written in lesson 5) and go over: have them use color/pencils to indicate who will say what.

- 11) Have students practice reading them with their partners, making sure they know all the words, etc...
- 12) After they have practiced reading them, have them practice presenting to the wall—remind them of rubric:
  - *posture and eye contact*
  - *enthusiasm*
  - *voice usage*
- 13) Have students come back together and present for each other...tell them to note good things about the other groups so that they might be able to adopt them!
- 14) Students should have an opportunity to present their short speeches (3 minutes) to other classes in order to increase awareness. Give the students their 'speaking schedule,' go over finding rooms, review procedures for entering a classroom. Give students a rubric to take with them (to be used by the teacher in the classroom they present in)
- 15) **Student presentations**

**Closure:** After the presentations, students will come back to the classroom to debrief: how did it go? What went well, what didn't go so well, what would you do differently?

**Evaluation:**

Grade on presentation skills.

## Lesson Plan

Subject: Leadership/Public Engagement

Lesson: 8 of 9: In ACTION!!

**Grades:** 6-9

**Unit:** From Heart to Hands: Let's DO Something!

**Time:** 45 minutes

**Materials:**

all supplies for project

**Unit Background:** Students have been introduced to the project, have completed surveys to determine strengths/weaknesses, have chosen the names and details of project, have completed press releases and posters to market the campaign, learned presentation skills and put these skills into practice.

**Objectives:** The student will actively engage in carrying out their project.

**Introduction:** (5 minutes)

- 1) Hand back presentation marks for students.
- 2) Ask students how presentations went-reflection.

**Body:** (30-35 minutes)

- 1) PROJECT/EVENT IS CARRIED OUT

**Closure:**

Ask students what they did, how they felt, what difference they think it made, how people reacted, etc...

**Evaluation:**

Student participation and enthusiasm project, discussion at end.

## Lesson Plan

Subject: Leadership/Public Engagement

Lesson: 9 of 9

**Grades:** 6-9

**Unit:** From Heart to Hands: Let's DO Something!

**Time:** 45 minutes

**Materials:**

Self-evaluations

Reflection Charts

**Unit Background:** Students have been introduced to the project, have completed surveys to determine strengths/weaknesses, have chosen the names and details of project, have completed press releases and posters to market the campaign, learned presentation skills, have carried out their event

**Objectives:** The student will evaluate the project and his/her participation/engagement in it.

**Introduction:** (5 minutes)

- 1) Review what makes a good leader. (Write on board)...If necessary, break down day-by-day and have students remember what we did each day, how that made them better leaders.

**Body:** (30-35 minutes)

- 1) Talk about another thing that makes good leaders: reflection. What does this mean?
- 2) Hand out Reflection Charts—tell students that good leaders plan ahead, and it's important to think about IF we were to do this again, what would we change...and WHY? Writing it down is a good way of record-keeping—because by the time next year rolls around, it will be hard to remember...
- 3) (Students who finish early can try to brainstorm MORE ideas, or...)
- 4) Hand out self-evaluation. We've evaluated the project, but now it's time to evaluate OUR part in it—what did WE do well, what could WE work on-- It's all part of being a good leader. Read over questions to class, explain each one. Also explain the importance of honesty—a self-reflection does no good if you aren't honest with yourself—how do you grow?!
- 5) Give students time to work.
- 6) *Debrief:* ask students what they thought THEY did well...also, what they thought they could WORK on...why? What aspects of leadership (reference board) do they think they are good at/need improvement? What can/are they going to do to improve these?

**Closure:**

Have students write a few sentences about what they learned/still want to learn about Leadership/Public Engagement—and have them present it to the class, and we can give them a sandwich (constructive criticism) about public speaking and content.

**Evaluation:**

Student evaluations (both for the project and themselves).



## ...Multiple Intelligences Quiz...



For each statement below, put the number that best reflects *you*.

4 = all the time  
3 = most of the time  
2 = some of the time  
1 = not very much  
0 = not at all

### **I**

- a) \_\_\_\_ I enjoy reading.
- b) \_\_\_\_ I like riddles and brain teasers.
- c) \_\_\_\_ I sketch or draw when I think.
- d) \_\_\_\_ I like to sing, even to myself.
- e) \_\_\_\_ I am good at using my hands to build.
- f) \_\_\_\_ I am good at making new friends.
- g) \_\_\_\_ I dislike confrontations.
- h) \_\_\_\_ I like being outside whenever possible.

### **II**

- a) \_\_\_\_ I find writing enjoyable.
- b) \_\_\_\_ I like Math better than Language Arts
- c) \_\_\_\_ I am good at picturing things in my mind.
- d) \_\_\_\_ I like to make up my own melodies.
- e) \_\_\_\_ I get bored when I can't move around.
- f) \_\_\_\_ I like social activities.
- g) \_\_\_\_ I often talk to myself.
- h) \_\_\_\_ I enjoy outdoors activities.

### **III**

- a) \_\_\_\_ I like to debate.
- b) \_\_\_\_ I am good with numbers.
- c) \_\_\_\_ I am good at reading a map.
- d) \_\_\_\_ I am able to keep a tune.
- e) \_\_\_\_ I often talk with my hands.
- f) \_\_\_\_ I love to meet new people.
- g) \_\_\_\_ I like to have time for myself.
- h) \_\_\_\_ I like to draw/take pictures of nature.

When you are finished putting numbers in the blanks, add up the points for each letter:

- a) \_\_\_\_
- b) \_\_\_\_
- c) \_\_\_\_
- d) \_\_\_\_
- e) \_\_\_\_
- f) \_\_\_\_
- g) \_\_\_\_
- h) \_\_\_\_

Circle the letter that has the most points beside it.



**Scoring:**

- a) Verbal/linguistic: "word smart"
- b) Logical/Mathematical: "number smart"
- c) Visual/Spatial: "picture smart"
- d) Musical: "music smart"
- e) Kinesthetic/Tactile: "body smart"
- f) Interpersonal: "people smart"
- g) Intrapersonal: "self smart"
- h) Naturalist: "nature smart"

# Leadership Characteristics and Skills Survey



5 = all of the time  
4 = most of the time  
3 = some of the time  
2 = not very often  
1 = not at all

1.	I enjoy communicating with others.	5	4	3	2	1
2.	I am honest and fair.	5	4	3	2	1
3.	I use input from others to make decisions.	5	4	3	2	1
4.	I listen to feedback and ask questions.	5	4	3	2	1
5.	I show loyalty to my group members.	5	4	3	2	1
6.	I help to create a space where people can feel comfortable.	5	4	3	2	1
7.	I like to dream about where I will go in life.	5	4	3	2	1
8.	I give praise and recognition to others.	5	4	3	2	1
9.	I give constructive criticism and address potential problems.	5	4	3	2	1
10.	I develop plans and goals to reach those plans.	5	4	3	2	1
11.	I display tolerance and flexibility when working in groups.	5	4	3	2	1
12.	I can be assertive when needed.	5	4	3	2	1
13.	I am can deal with it when things change.	5	4	3	2	1
14.	I treat others with respect and dignity.	5	4	3	2	1
15.	I make myself available to help others.	5	4	3	2	1
16.	I like to take charge.	5	4	3	2	1
17.	I can accept ownership for group/team decisions.	5	4	3	2	1
18.	I encourage other group/team members.	5	4	3	2	1
19.	I can respond well to someone who is upset with me.	5	4	3	2	1
20.	I have helped people cope with personal problems.	5	4	3	2	1
21.	I follow through when I make a promise or commitment.	5	4	3	2	1
22.	I am curious.	5	4	3	2	1
23.	I can easily persuade people.	5	4	3	2	1
24.	I am a willing learner.	5	4	3	2	1
25.	I can admit mistakes and take responsibility for my actions.	5	4	3	2	1
26.	I like to talk to people and I am a great listener.	5	4	3	2	1
27.	I can divide jobs within a group.	5	4	3	2	1
28.	I can be trusted.	5	4	3	2	1
29.	I like speaking in front of people.	5	4	3	2	1
30.	I am tactful; I can phrase things to avoid offending people.	5	4	3	2	1
31.	I can see what needs to be done in a situation.	5	4	3	2	1
32.	I enjoy problem solving.	5	4	3	2	1
33.	I am creative.	5	4	3	2	1
		Total # of each:				
		Total points:				

## Scoring

(below 80): you have some skills to work on...but with time, great things will develop!

(81-125): you are getting close to becoming a great leader!

(126-165): fantastic—you have many skills that contribute to leadership!



Name: \_\_\_\_\_

Goal Setting Assignment: Checklist

- ☐ There are (at least) 3 listed goals

Chosen Goal

- ☐ Specific  
☐ Measurable  
☐ Attainable  
☐ Realistic  
☐ Timely

Total: /5



Name: \_\_\_\_\_

Goal Setting Assignment: Checklist

- ☐ There are (at least) 3 listed goals

Chosen Goal

- ☐ Specific  
☐ Measurable  
☐ Attainable  
☐ Realistic  
☐ Timely

Total: /5



## Advertising Techniques

The following techniques are used to evoke responses from people:

### (a) Colors

*Red:* commands attention, exciting, stimulating

*Blue:* non-threatening, calm, wholesome, healthy

*Yellow:* welcoming, friendly, happy, secure

*Green:* youthful, fresh, natural, growth, relaxing

*Purple:* royal, dignified, expensive (especially when paired with gold)

*Black:* mysterious, sophisticated, gloomy, threatening

*Brown:* earthy, warm, comforting, homey

*White:* purity, innocence, healthy

*Pastels (blue and pink):* innocent, calming

### (b) Shapes

*Rounded:* relaxing, feminine, inviting

*Angular/Straight:* masculine, powerful

*Jagged:* upsetting, threatening

### (c) Lines

*Horizontal (--):* soothing, relaxing, peaceful

*Vertical ( | ):* inspires awe

*Diagonal ( / ):* implies action or movement

### (d) Words

*Imagery:* keeps interest

*Short sentences/phrases:* keeps attention

### (e) Size of Words/Graphics

*Large:* draws the eye

*Small:* more easily ignored

### (f) Organization/Neatness

*Evenly Spaced:* peaceful, soothing

*Crammed, Messy:* overwhelming, anxious



## ...Writing a Press Release...

*When a press release comes in, editors look for the following things:*

WHAT: Is it an event?

WHEN/WHERE: When and where does it happen?

WHY: Why would our readers want to hear about it?

WHO: Who does it impact?

In the newsroom, we are deluged with press releases every day—make sure yours stands out!

1. Ask yourself whether the readers will perceive your release to be interesting and newsworthy. Make sure you address those 5 W's listed above.
2. Write a good headline for your release, something a little catchy. Your headline won't be re-used by editors, (they write their own headlines), but it will catch the attention of the editor who's deciding whether your release is worth paying attention to.
3. Format: Keep it simple and sweet. Start at top with: *For Immediate Release*. Then put your headline.  
*Start* the first paragraph with the date of the release and the place (COALDALE, AB:).  
*End* the release with the phone number and e-mail address of a contact person.
4. Structure: Follow the *inverted pyramid principle*: start with the most important information and work your way down to fluffy details.
5. Send the release via fax or e-mail to your contacts.  
If you send via e-mail, put the release in body of your email, as attachments are often deleted due to virus fears.
6. Media is under no obligation to print news releases, but if they are interested, they will call you (and when they do, respond a.s.a.p., as they are often under a deadline). If your releases are full of good content that is of interest to their readers, you will eventually see results.

## Sample Press Release

For Immediate Release

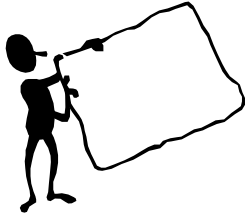
### STUDENTS TO MAKE MOST OF 'FROSTY' WEATHER

On March 8, 2006, students at Winter Outside School in Calgary, Alberta, will make the most of the wintry weather conditions. Students will compete in a lunchtime contest on school grounds to build the most creative snowman. Button noses, corn cob pipes and eyes made of coal are sure to abound in the festivities from 12-1p.m. The activity is a teacher-organized initiative to encourage positive snowy day activity and to channel student energy away from throwing snowballs. The sculptures will be on display to the public; members of the community are encouraged to watch the competition unfold and to show support of this new version of youth artistry.

Contact: Joe Smith

*Phone:* 111-1111

*E-mail:* my.name@shaw.ca



Name(s): \_\_\_\_\_

## Marketing Product/Press Release

	4	3	2	1	
<b>Content (5 W's: who, what, when, where and how)</b>	Product adequately addresses the 5 W's.	Product addresses 4 of the 5 W's.	Product addresses 3 of the 5 W's.	Product addresses less than 3 of the 5 W's.	
<b>Attractiveness and Creativity</b>	The product is exceptionally attractive in terms of design, layout, and neatness.	The product is attractive in terms of design, layout and neatness.	The product is acceptably attractive though it may be a bit messy.	The product is messy or poorly designed.	
<b>Word Choice and Usage</b>	The product contains word choices that make it exceptionally interesting to readers.	The product contains word choices that make it interesting to readers.	The product is marginally interesting to read.	The product shows no intent to interest a reader.	
					/12

Comments:



Name(s): \_\_\_\_\_

## Marketing Product (Press Release)

	4	3	2	1	
<b>Content (5 W's: who, what, when, where and how)</b>	Release addresses the 5 W's.	Release addresses 4 of the 5 W's.	Release addresses 3 of the 5 W's.	Release addresses less than 3 of the 5 W's.	
<b>Spelling and Grammar</b>	Final product has no spelling or grammar errors.	Final product has no more than 2 spelling or grammar errors.	Final product has 3 or less spelling or grammar errors.	Final product has more than 3 spelling or grammar errors.	
<b>Word Choice and Usage</b>	The release contains facts, figures, and/or word choices that make it exceptionally interesting to readers.	The release contains facts, figures, and/or word choices that make it interesting to readers.	The release contains some facts or figures but is marginally interesting to read.	The release does not contain facts or figures that might make it interesting to read.	
					/12

Comments:



## Getting the Word Out: Presentations

*Supplies:* pencil/pen, piece of looseleaf



### **\*\*STEP 1\*\***

#### What do I say?!

*Start by covering the 5 W's:*

WHAT: Is it an event?

WHEN: When does it happen?

WHERE: Where does it happen?

WHY: Why would your audience want to hear about it?

WHO: Who does it impact?

- ☐ Talk it out with your partner. Pretend you're presenting: what do you say? How do you say it? If you say something that you want to keep for your real presentation, write it down—this is a great way to brainstorm!
- ☐ Once you have a feel for what you want to include, write out your presentation, word for word. You don't want to be reading off your paper, but writing down what you want to say helps to organize your thoughts.
- ☐ Use catchy phrases and short sentences: people will often 'space out' during long, drawn out sentences.
- ☐ Split the speaking load with your partner: make sure that you're each speaking approximately  $\frac{1}{2}$  the time (that way you don't have as much to memorize!)
- ☐ Time your presentation: you don't want it to be much longer than 3 minutes—so try to pack as much good information in as you can!

## **\*\*STEP 2\*\***

### How do I say it?

*Focus on things like:*

- ☐ *Posture* : not shuffling around  
                  : standing up straight, not leaning against wall/desks
- ☐ *Memorization* : know what you want to say and don't read it off your paper. This helps you to be able to make better eye contact with your audience.
- ☐ *Volume* : speak loudly enough for people at the back of the room to hear  
                  : make sure your voice is clear  
                  : don't talk too fast
- ☐ *Eye Contact* : this will help you connect with your audience and show them that you're excited about this!
- ☐ *Gestures* : not fiddling with papers or pencils  
                  : using hand movements to show that you're excited!

The best way to improve is to **PRACTICE, PRACTICE, PRACTICE!** Have your partner listen to you and let you know what you're good at and what you need to work on. When you've done this a few times, get together with another pair and give them a version of your presentation—give feedback to each other!

Name: \_\_\_\_\_



## Presentation Skills

	4	3	2	1	
<b>Posture and Eye Contact</b>	You stood up straight, looked confident, and made eye contact with all audience members.	You stood up straight, looked confident, and made eye contact with most audience members.	You sometimes stood up straight, looked confident, and made eye contact with some audience members.	You didn't stand too straight, and had trouble looking at your audience.	
<b>Enthusiasm</b>	Your face and body language show me that you're really excited!	Your face and body language show me that you're excited most of the time.	Your face and body language don't always show me that you're excited.	Your face and body language didn't show me how excited you were.	
<b>Voice Usage</b>	You spoke clearly and distinctly, and used pauses and appropriate volume to enhance effect.	You spoke clearly and distinctly, but occasionally spoke too quickly/softly.	You spoke clearly and distinctly most of the time, but sometimes you spoke too quickly/softly.	You often mumbled or couldn't be understood, spoke very quickly/softly.	
					/12

Comments:

Name: \_\_\_\_\_

## Self Evaluation

“Leadership involves the reflection of your past, knowing how to surmount weakness and fortify strengths as strong, independent leaders as well as individuals making a mark in today's society to the greatest degree.”

—Anonymous

5 = all the time  
4 = most of the time  
3 = some of the time  
2 = not very often  
1 = oops...

For each question, circle the number that corresponds to how you performed in the project. Give a reason for your assigned grade in the lines below each.

- 1) I arrived well-prepared and ready to learn and work. 5 4 3 2 1  
(brought supplies, arrived on time...)

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- 2) I demonstrated good listening when the teacher, guests, and classmates were speaking. 5 4 3 2 1  
(good eye contact, not talking to others or fiddling)

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- 3) I was excited about the project and spread my enthusiasm to others. 5 4 3 2 1  
(telling others, presentation skills, passing out cards)

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**Total:**     **/15**

One thing I could improve: \_\_\_\_\_

One thing I did well: \_\_\_\_\_

\_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

😊 Reflection Chart 😊

We're done! Or *are we*? Read the quote above and then think about the project. What worked well, and why? What about things that didn't go so well? If you were to do the project again, what would you change? Using point form in the boxes below, put your thoughts about the project. *Marks will be given for completeness and depth of thought.*

Things I Liked	Why?	Things I'd Change	Why?



CHF

*Sustainable Livelihoods:  
Poverty & Quality of Life*



ACGC   
Alberta Council for Global Cooperation





## Lesson 2: Sustainable Livelihoods — Poverty & Quality of Life

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### Description

*1x60 minute lesson*

In this lesson, students examine the factors that contribute to the cycle of poverty faced by many people in developing countries. Students analyze quality of life and measurement tools such as the Human Development Index. Class discussion, playing an interactive card game in small groups, and individual work are all used to address the topics of poverty and development with students.

### Subjects

Economics (Grade 11), Geography (Grades 11 & 12), Science (Grades 11 & 12), Politics (12), Social Sciences and Humanities (Grades 11 & 12)

*See the Curriculum Connections section for detailed links to courses and expectations.*

### Materials Needed

Student Worksheet ([BLM 2.1](#)) Sustainable Livelihoods Chart

Student Worksheet ([BLM 2.2](#)) Sustainable Livelihoods Score Card

Student Handout ([BLM 2.3](#)) Sustainable Livelihoods Instruction Sheet

Student Handout ([BLM 2.4](#)) Sustainable Livelihoods Playing Cards

Note: French BLMs/Student Sheets can be found [here](#).

### Lesson Preparation

1. Photocopy [BLM 2.1](#) and [BLM 2.2](#) so that each student receives a copy. [BLM 2.2](#) can be photocopied and then cut in two as each student only requires one score card.
2. Photocopy one instruction sheet per group ([BLM 2.3](#)). Photocopy, cut out and laminate the activity cards ([BLM 2.4](#) – eight pages) so that each group of 4-5 students will receive a set. Reuse next year!
3. Review the instruction sheet ([BLM 2.3](#)) to understand the rules of the game.
4. Review the Teacher Background Notes for this lesson. Also see the [Country Information](#) section and [Resources](#) section under [Extra Resources](#). The resources found under the Country Information section can be used to give students further information about the countries that appear on some of the activity cards (such as maps, statistics, flags, histories, etc.).

**CHF is a non-profit organization dedicated to enabling poor rural communities in developing countries to attain sustainable livelihoods, since 1961.**

**[www.chf-partners.ca](http://www.chf-partners.ca)**

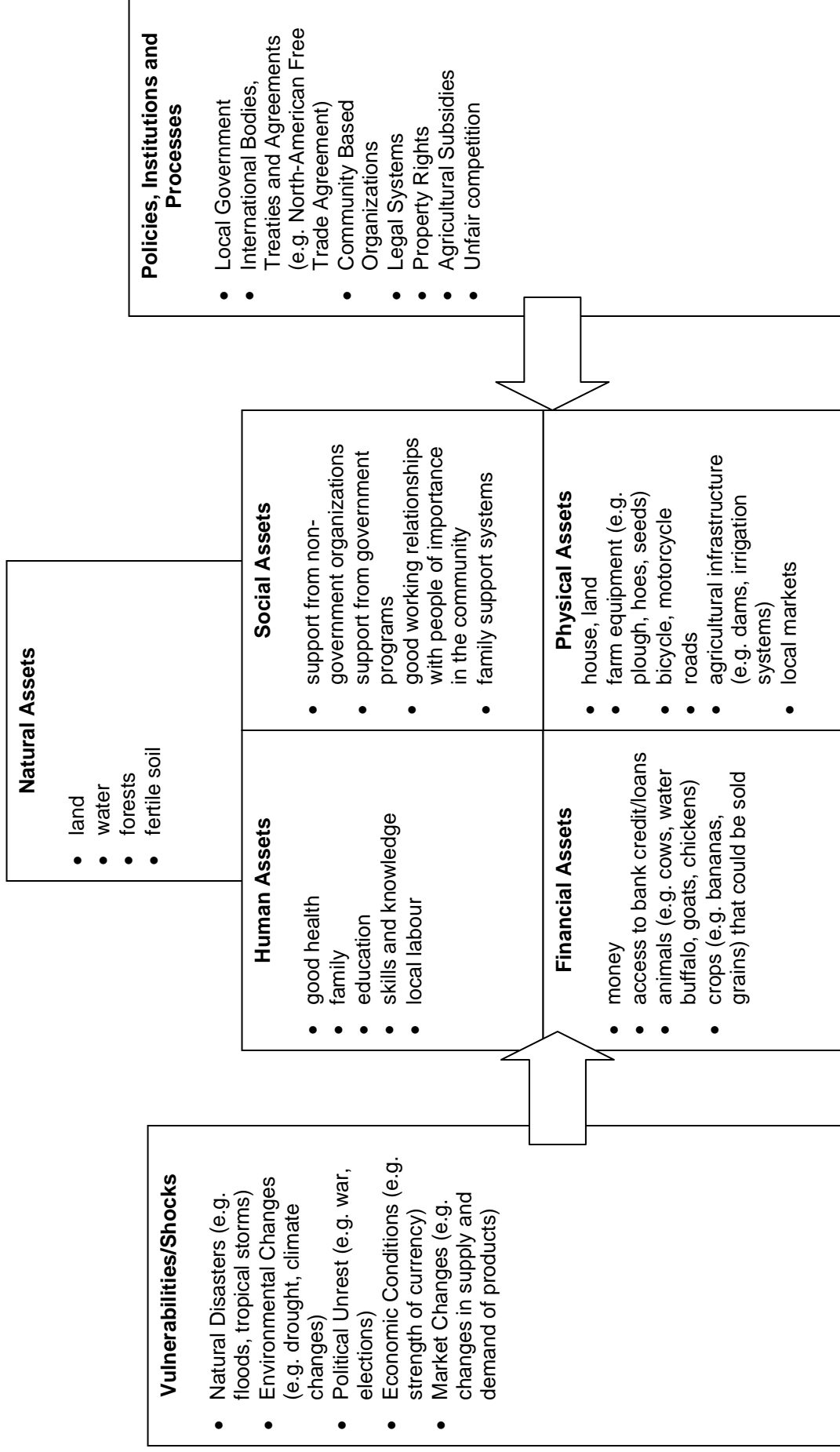
## Teaching/Learning

1. The teacher may determine students' prior knowledge about measuring quality of life by asking the students, "What methods or tools do you know of that are used to measure quality of life in the world?"
2. The teacher leads a class discussion by posing the question, "What type of assets (resources) does a person need to maintain a healthy life?" Conduct a brainstorming session as a class and have students provide examples of types of assets.
3. Introduce the concept of Sustainable Livelihoods (see Teacher Background Notes). Provide each student with a Sustainable Livelihoods Chart ([BLM 2.1](#)) to complete individually based on the discussion and the students' own ideas. See the next page for a sample answer sheet.
4. Divide the class into groups of 4 – 5 students to play the Sustainable Livelihoods card game. Distribute one Sustainable Livelihoods Score Card ([BLM 2.2](#)) to each student. Distribute one Sustainable Livelihoods Instruction Sheet ([BLM 2.3](#)) and one set of Sustainable Livelihoods Playing Cards ([BLM 2.4](#)) to each group. Allow students time to play the game.
5. As a class, debrief the Sustainable Livelihoods card game. Have each group present the person in their group who finished with the most sustainable livelihood and explain the group's reasoning for choosing that person. Did all groups use the same method for determining who had the most sustainable livelihood leading to the highest quality of life? Did groups value different asset categories in different ways?
6. The teacher introduces the concept of the Human Development Index to the class (see Teacher Background Notes). As a class, discuss the use, strengths and limitations of the Human Development Index. Class discussions should focus on the following questions:
  - How could the Human Development Index be used — by international organizations, by individual countries?
  - What is the strength of using the Human Development Index over other methods of determining quality of life?
  - What are some limitations of the Human Development Index?
  - What other criteria do you think should be included as a key indicator for Human Development? Explain your choice.

Note: If you are looking for an easier version of this game for your students, please refer The Real Survivor Game at the Grades 7-10 level.

### Sustainable Livelihoods Chart – Sample Answer Sheet for [BLM 2.1](#)

To have a healthy, sustainable way of living people must have different types of assets - these assets are the building blocks of life. Despite the assets one person may hold, there are always external forces at work. There are two categories of external forces listed: Vulnerabilities/Shocks and Policies, Institutions & Processes. Complete the diagram below by listing examples of vulnerabilities, policies and each type of asset.



## Extension Activities

- Students research the current Human Development Report to see where Canada ranks compared to other countries in the world in terms of quality of life. Look at the Human Development Indexes of countries over time and investigate the causes for their change in quality of life ranking. Research the Human Development Index for each of the countries mentioned in the activity cards of this lesson. Visit the United Nations Development Programme Human Development Report Website at <http://hdr.undp.org> and click on HD Reports and then Global Reports from the list.
- Students research an international development organization and complete the Sustainable Livelihoods Chart ([BLM 2.1](#)) to indicate what types of Asset are being affected by one of the organization's major projects, what vulnerabilities or risks are being mitigated and/or what policies are being adjusted to improve quality of life and break the cycle of poverty for communities in developing countries.

## Teacher Background Notes

### ***Sustainable Livelihoods***

“Sustainable livelihoods” is a popular phrase in the world of international development. But what does it mean?

Livelihood traditionally refers to a person's means of support or the way he/she earns money to meet the basic needs of life. The concept of livelihoods in the “sustainable livelihoods” context extends beyond just financial support. It includes all of the assets and resources in life that are used to meet peoples' needs. The sustainable component of “sustainable livelihoods” means that the means of livelihood should be able to adapt, withstand shocks and not destroy the natural environment.

Development for sustainable livelihoods puts people first, building on their strengths and their own understanding of the development needed in their lives and in their community. A sustainable livelihoods approach to development is holistic. It looks at the big picture and the many factors that influence the cycles of poverty, and not solely at one sector of development, such as economic.

### ***Human Development Index***

The Human Development Index (HDI) is a measure of human development coordinated by the United Nations Development Programme. It is a summary composite index that measures a country's average achievements in three basic aspects of human development: longevity, knowledge, and a decent standard of living. Longevity is measured by life expectancy at birth; knowledge is measured by a combination of the adult literacy rate and the combined primary, secondary, and tertiary gross enrolment ratio; and standard of living measure by Purchasing Power Parity (PPP) income.

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Each year a Human Development Report is produced by the United Nations. The first Human Development Index was calculated in 1990; however, data has been used to calculate HDIs back to 1975. The HDI of a country may be compared over time to measure changes in development.

Complete information on the HDI and the most current Human Development Report can be found on the website: <http://hdr.undp.org/>. Some Frequently Asked Questions, and answers, from the web site have been provided here for your quick reference.

### ***How is the Human Development Index used?***

The Human Development Index is used to capture the attention of policy makers, media and NGOs, and to draw their attention away from the more usual economic statistics to focus instead on human outcomes. The HDI was created to re-emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth.

The HDI is also used to question national policy choices — asking how two countries with the same level of income per person can end up with such different human development outcomes (HDI levels). For example, Vietnam and Pakistan have similar levels of income per person, but life expectancy and literacy differ greatly between the two countries, with Vietnam having a much higher HDI value than Pakistan. These striking contrasts immediately stimulate debate on government policies on health and education, asking why what is achieved in one country is far from the reach of another.

Finally, the HDI is used to highlight wide differences within countries, between provinces or states, across gender, ethnicity, and other socioeconomic groupings. Highlighting internal disparities along these lines has raised national debate in many countries.

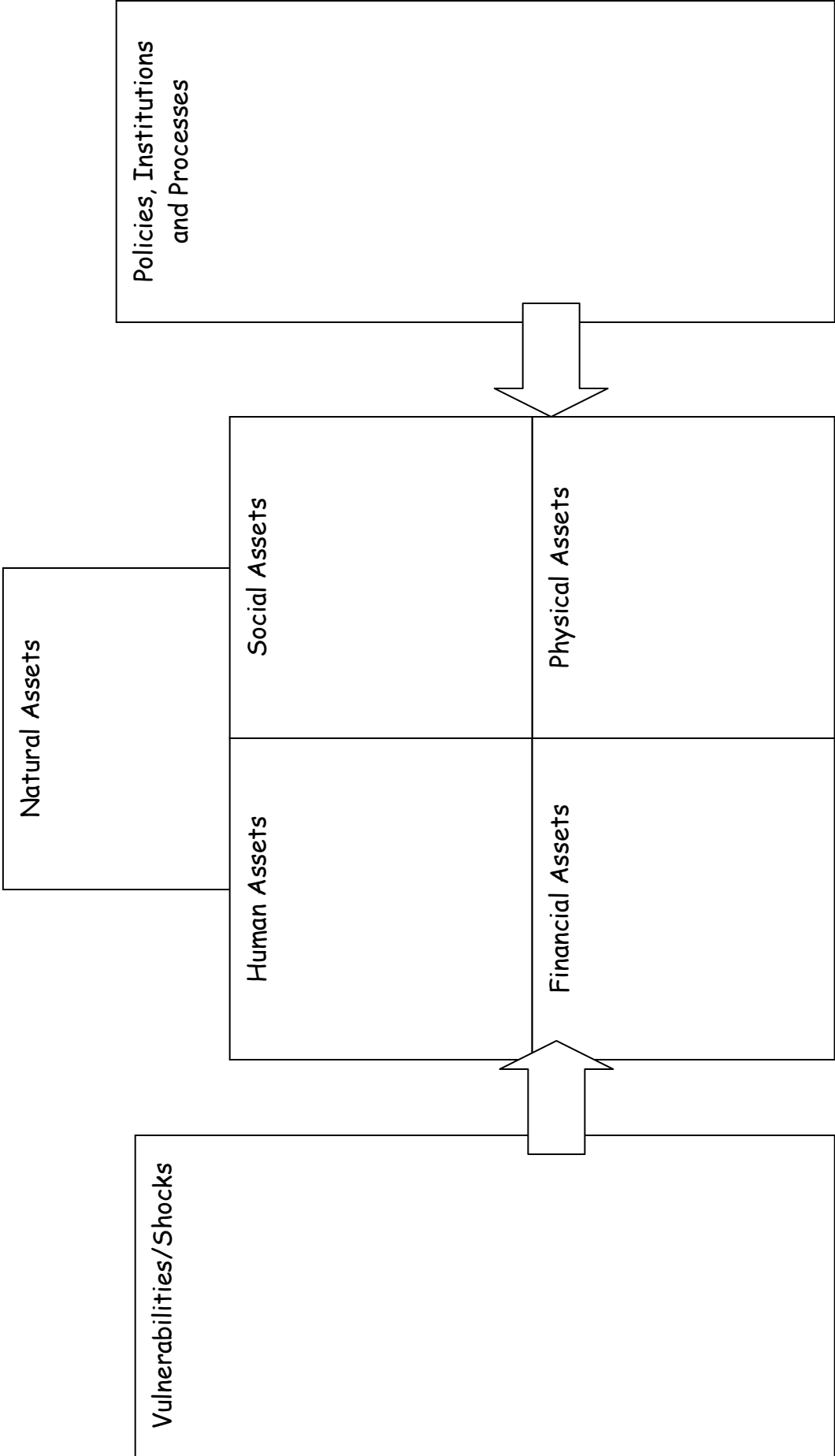
### ***Is the HDI enough to measure a country's level of development?***

Not at all. The concept of human development is much broader than what can be captured in the HDI. The HDI, for example, does not reflect political participation or gender inequalities. It also does not include important indicators such as respect for human rights, democracy and inequality. HDI can only offer a broad proxy on the issues of human development. A fuller picture of a country's level of human development requires analysis of other human development indicators and information.

**Note:** The new seeds mentioned in the game cards are of the natural selection variety and are not of the genetically modified type. Local farmers do not need special fertilizers to grow crops and can reuse seeds year after year.

**BLM 2.1 - Sustainable Livelihoods Chart**

To have a healthy, sustainable way of living people must have different types of assets - these assets are the building blocks of life. Despite the assets one person may hold, there are always external forces at work. There are two categories of external forces listed: Vulnerabilities/Shocks and Policies, Institutions and Processes. Complete the diagram below by listing examples of vulnerabilities, policies and each type of asset.



## BLM 2.2 - Sustainable Livelihoods Score Card

Sustainable Livelihoods Score Card	
Types of Asset	Your Score
1. Natural Asset	
2. Human Asset	
3. Social Asset	
4. Financial Asset	
5. Physical Asset	
<b>Total Score</b>	

Sustainable Livelihoods Score Card	
Types of Asset	Your Score
1. Natural Asset	
2. Human Asset	
3. Social Asset	
4. Financial Asset	
5. Physical Asset	
<b>Total Score</b>	

## **BLM 2.3 - Sustainable Livelihoods Card Game Instructions Sheet**

### Materials

- Sustainable Livelihoods score card for each person
- Sustainable Livelihoods cards (one set per group, face down on the table in the middle of the group)

### Objective

The objective of the game is to create a sustainable livelihood for yourself by collecting the most points in each type of asset category.

*Note: You may have positive or negative point scores in the game.*

### Instructions

1. Students take turns drawing a Sustainable Livelihoods card from the middle and reading it aloud to the group. The player, or sometimes the whole group, adjusts their Asset points as indicated on the card. Each person draws only one card per turn and keeps the card chosen in their own pile.
2. Continue until all of the cards have been used.
3. At the end of the game each student tallies his/her total points.
4. Each group must decide which person in the group has achieved the most sustainable livelihood which will lead to the highest quality of life and explain their reasoning.
5. Each group presents their sustainable livelihoods winner and explains why he/she was considered to have achieved the most sustainable livelihood/highest quality of life.



## BLM 2.4 - Sustainable Livelihoods Playing Cards

<p>A forest fire has occurred in the community that will reduce everyone's food and fuel supplies.</p> <p><b>Each person in the group subtracts 2 points from your Natural Asset score.</b></p>	<p>A clean source of drinking water has been installed in your community through the support of an NGO. You now have closer access to water and are healthier.</p> <p><b>Add 2 Natural Asset points and 2 Human Asset points to your score.</b></p>
<p>You have been able to get a small loan with the assistance of a local NGO that has coordinated the loan with a nearby bank in town. With the loan you are able to start a small business.</p> <p><b>Add 3 Financial Asset points to your score.</b></p>	<p>Your new small business of raising chickens has been making a profit.</p> <p><b>Add 2 Financial Asset points to your score and 1 Human Asset point to your score.</b></p>
<p>A new road has been built giving your village better access to markets and services in nearby towns.</p> <p><b>Add 3 Physical Asset points to your score.</b></p>	<p>Your father died from malaria.</p> <p><b>Subtract 2 Social Asset points and 2 Financial Points from your score.</b></p>
<p>Congratulations! You have just been married. Your network of family and friends has doubled.</p> <p><b>Add 3 Social Asset points and 1 Financial point to your score.</b></p>	<p>Cultural celebrations are taking place all week in your village.</p> <p><b>Add 2 Social Asset points to your score.</b></p>
<p>You have just completed primary school at the age of 14.</p> <p><b>Add 1 Human Asset point to your score.</b></p>	<p>You have just completed secondary school.</p> <p><b>Add 2 Human Asset points to your score.</b></p>

## BLM 2.4 Continued - Sustainable Livelihoods Playing Cards

<p>You have just finished college/university. You have many loans to pay back.</p> <p><b>Add 3 Human Asset points to your score and subtract 2 Financial Asset points from your score.</b></p>	<p>Your village is affected by flooding. The road to the market has washed out. You have no way to get your tomatoes to the market and they are going to rot.</p> <p><b>Subtract 1 Financial Asset point and 1 Physical Asset point from your score.</b></p>
<p>A local NGO has made available to you a new variety of seeds that will better withstand dry conditions.</p> <p><b>Add 2 Physical Asset points to your score and 1 Human Asset point to your score.</b></p>	<p>You have successfully sold all of your vegetables at the market for a good price by putting in practice the information and skills learned through a women's marketing group hosted by a local NGO.</p> <p><b>Add 3 Financial Asset points, 1 Social Asset point to your score and 1 Human Asset point to your score.</b></p>
<p>You have been able to sell all of your extra eggs from the farm.</p> <p><b>Add 3 Financial Asset points to your score and 1 Human Asset point to your score.</b></p>	<p>You planted a new crop this year — soybeans — after gaining access to seeds through a local NGO. The leaves of the soybean plant provided a high-protein food source for your cows and you were able to produce more milk than before. You sold your extra milk at the market.</p> <p><b>Add 1 Financial Asset point, 1 Human Asset, and 1 Physical Asset point to your score.</b></p>

## BLM 2.4 Continued - Sustainable Livelihoods Playing Cards

<p>You continue to cut trees to provide firewood to cook for your family.</p> <p><b>Subtract 2 Natural Asset points from your score.</b></p>	<p>After participating in an information workshop by a local NGO, you learned about solar cookers and were able to apply for a loan. Now you are using a solar cooker to prepare your family's food which saves a lot of time because you no longer have to gather firewood so you can work more on other projects.</p> <p><b>Add 2 Natural Asset points to your score and 1 Social Asset point to your score and add 1 Financial Asset point to your score.</b></p>
<p>There was an information meeting by a local NGO in your community where you learned about a new drought-tolerant seed. Seeds were provided to participating farmers. Even though there has been some drought, the community has had a decent harvest. There will be almost enough food for everyone to eat this year.</p> <p><b>Add 1 Human Asset point, 1 Physical Asset point and 1 Social Asset point to each person's score.</b></p>	<p>Rainfall has been unpredictable, causing crops to be stunted and produce less food. The community has not had a good harvest and there will not be enough food for everyone to eat this year.</p> <p><b>Subtract 1 Human Asset point and 1 Natural Asset point from each person's score.</b></p>
<p>A soil erosion prevention method has been implemented on your farm — the hill has been terraced (made into steps). You will have more fertile soil for years to come and will be able to sell some of your crops for income.</p> <p><b>Add 3 Natural Asset points, 1 Human Asset point and 2 Financial Asset points to your score.</b></p>	<p>Your house was severely damaged during heavy rain. You had to rebuild your damaged house made of mud and grasses. It took you a lot of time, but looks great!</p> <p><b>Add 1 Physical Asset point to your score and subtract 1 Financial Asset from your score.</b></p>

## BLM 2.4 Continued - Sustainable Livelihoods Playing Cards

<p>After an NGO provided you with the skills and initial start-up asset for your business of selling duck eggs, you now have savings in the bank.</p> <p><b>Add 3 Financial Asset points, 1 Human Asset point and 1 Social Asset to your score.</b></p>	<p>You have good relationships with your neighbours and community members.</p> <p><b>Add 2 Social Asset point to your score.</b></p>
<p>You have been elected as a community representative to the local government.</p> <p><b>Add 2 Social Asset points, 1 Human Asset point and add 1 Financial Asset point to your score.</b></p>	<p>You have a large, healthy family. With all of you working together on the farm you are able to produce a large crop with enough food for your family and extra food to sell.</p> <p><b>Add 2 Human Asset point and 1 Financial Asset point to your score.</b></p>
<p>Your children are attending a good boarding school.</p> <p><b>Add 3 Human Asset points to your score and subtract 1 Financial Asset point from your score.</b></p>	<p>You own your house and farm land.</p> <p><b>Add 2 Financial Asset points to your score.</b></p>
<p>A new tax has been imposed on goods that you sell at the market.</p> <p><b>Subtract 1 Financial Asset point from your score.</b></p>	<p>A new government has been elected that provides primary education for all children.</p> <p><b>Each person in the group adds 1 point to your Human Asset score.</b></p>
<p>A new government has been elected that provides new social programs for all women and children.</p> <p><b>Each person in the group adds 1 Social Asset point to your score.</b></p>	<p>You planted trees to replace the section of forest that was harvested.</p> <p><b>Add 1 Natural Asset point to your score and subtract 1 Financial Asset point from your score.</b></p>

## BLM 2.4 Continued - Sustainable Livelihoods Playing Cards

<p>An NGO has helped to form a water-maintenance council in your community to maintain the water well so that it can continue to supply safe drinking water for many years to come.</p> <p><b>Add 1 Natural Asset and 1 Social Asset point to your score.</b></p>	<p>An NGO has brought an information network to your region, which will provide you with weather reports and market prices to help you plan for your farm management and the selling of your crops.</p> <p><b>Add 1 Social Asset point, 1 Human Asset point and 2 Financial Asset points to your score.</b></p>
<p>You have received a small inheritance from a family member.</p> <p><b>Add 1 Financial Asset point to your score and subtract 1 Social Asset point from your score.</b></p>	<p>Your family feels ill after drinking the local water from the nearby stream and is not able to work.</p> <p><b>Subtract 1 Human Asset point and 1 Financial Asset point from your score.</b></p>
<p>A river overflows and washes away much of the fertile topsoil from your farm field. Nutrients found in the topsoil that help your crop grow are lost. You will not be able to produce as much as previous years and you will not have any extra crop to sell at the market.</p> <p><b>Subtract 3 Natural Asset points and 2 Financial Asset points from your score.</b></p>	<p>Your farm tools were sold to pay for your son's medicine when he was ill. With the help of the medicine your son made a full recovery.</p> <p><b>Subtract 1 Physical Asset point from your score and add 1 Human Asset point to your score.</b></p>
<p>You introduce a new variety of rice on your farm, using the knowledge and experience of a local NGO. This variety doubles the amount of rice you are able to grow in a season. You sell some of your extra rice for income.</p> <p><b>Add 1 Physical Asset point, 1 Social Asset point and 1 Financial Asset point to your score.</b></p>	<p>Soybeans have been introduced to your farm for the first time. They are growing well. From the soybeans you will be able to make tofu and add protein to your diet that you currently lack.</p> <p><b>Add 1 Human Asset point to your score.</b></p>

## BLM 2.4 Continued - Sustainable Livelihoods Playing Cards

<p>A new integrated pest management system has been introduced on your farm that will allow you to control pests effectively and use fewer pesticides. Not having to buy pesticides will save you money for other uses.</p> <p><b>Add 1 Natural Asset point, 1 Human Asset point and 1 Financial Asset point to your score.</b></p>	<p>A swarming of locusts (a type of insect pest) came and ate the crops in the field. You will have less food this year to feed your family and no surplus crop for sale.</p> <p><b>Subtract 1 Human Asset point and 2 Financial Asset points from your score.</b></p>
<p>You tried to start a new business but had very few customers. You are not able to pay your loan back to the bank on time and penalty fees are accumulating.</p> <p><b>Subtract 2 Financial Asset points from your score.</b></p>	<p>You and your family are illiterate. This makes it very difficult for you to get information about how to improve your farm management practices.</p> <p><b>Subtract 2 Human Asset points and 1 Financial Asset point from your score.</b></p>
<p>You own one shovel and one hoe for farm equipment.</p> <p><b>Add 1 Physical Asset point to your score.</b></p>	<p>After saving money for a long time, you now own a water buffalo that can be used to plough the fields and also acts like savings in a bank. It can be sold in the case of an emergency.</p> <p><b>Add 2 Physical Asset points and 2 Financial Asset points to your score.</b></p>
<p>Your plot of land is very small and you are unable to grow enough food to feed your family. As a result your family is hungry and ill.</p> <p><b>Subtract 1 Human Asset point from your score.</b></p>	<p>You have been able to grow rice on your land however, your family is not getting all of the nutrients they need and are <u>very</u> sick.</p> <p><b>Subtract 2 Human Asset points from your score.</b></p>

## BLM 2.4 Continued - Sustainable Livelihoods Playing Cards

You had a good harvest this year, but are still paying the loan back from when your child was sick and you needed money to pay for medicine and transportation to town.

**Subtract 1 Financial Asset point from your score.**

You took out a loan to purchase a cow. Your cow became sick and died because you did not have the knowledge and skills to treat it. How will you pay back the loan?

**Subtract 2 Financial Asset points and 1 Physical Asset point from your score.**

A local NGO has coordinated with a bank in a nearby town for you to receive a loan to purchase a cow. The NGO will provide you with training about how to provide proper nutrition and veterinary practices for your animal to ensure it stays healthy and provides maximum milk production. The milk will be used to improve your children's nutrition and some will be sold to provide a small income.

**Add 1 Physical Asset point, 1 Financial Asset point and 1 Human Asset point to your score.**

Your family's farm is having a high rate of death among the chickens that you are raising. You don't know why this is happening and you don't know what to do, or who to contact to get information. Your chickens are dying and you are unable to sell any.

**Subtract 2 Physical Asset points, 1 Human Asset point and 2 Financial Asset points from your score.**

Your father died of HIV/AIDS and now you must quit school to run the family farm. Your father did not teach you how to do everything on the farm so you are not able to produce as much food as he could. Your father used to grow enough food to sell some extra food at the market. You and your family do not have enough food to eat.

**Subtract 2 Social Asset points, 2 Human Asset points and 1 Financial Asset point from your score.**

The only source of water for your village is a river nearby. There is no water sanitation system in place. You become sick from a parasite in the water. You are unable to work on your farm for several days due to the sickness and lose 10% of your crop. You will not have any surplus crop to sell this year.

**Subtract 1 Natural Asset point, 2 Human Asset points and 1 Financial Asset point from your score.**

## BLM 2.4 Continued - Sustainable Livelihoods Playing Cards

You live in Bangladesh where a serious flood has occurred and washed away your crop. You will not have a crop this year and future years' crops will be affected due to loss of topsoil and lack of seeds.

**Subtract 2 Natural Asset points, 1 Physical Asset point and 1 Human Asset point from your score.**

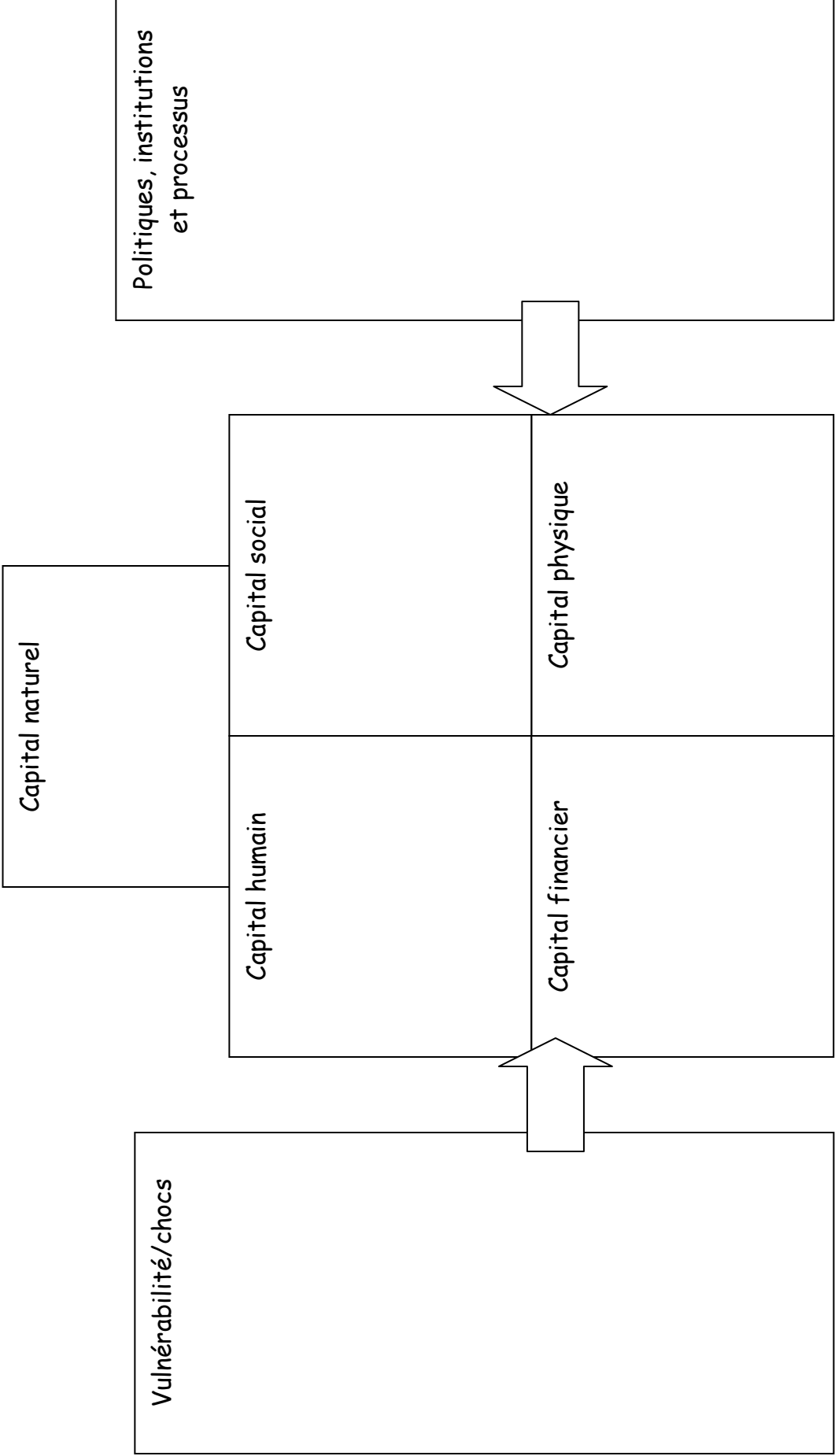
Your family becomes very ill from drinking water from the nearby stream. You were supposed to go to the market to sell your yams, but because of your illness you are unable to walk the long distance to the market. The yams rot before you are able to sell them.

**Subtract 2 Human Asset points and 1 Financial Asset point from your score.**



**BLM 2.1 - Tableau des moyens de subsistance durable**

Pour vivre en santé à long terme, certains types de capital sont nécessaires. Ces types de capital sont le fondement de la vie. Malgré tous les capitaux qu'une personne possède, certaines forces extérieures ont toujours un impact. Voici deux catégories de forces extérieures : vulnérabilité/chocs et politiques, institutions et processus. Complétez le tableau ci-dessous en donnant des exemples de vulnérabilité, de politiques et de chaque type d'atout.



## BLM 2.2 - Tableau de pointage des moyens de subsistance durable

Tableau de pointage des moyens de subsistance durable	
Type de capital	Votre pointage
1. Capital naturel	
2. Capital humain	
3. Capital social	
4. Capital financier	
5. Capital physique	
<b>Total des points</b>	

Tableau de pointage des moyens de subsistance durable	
Type de capital	Votre pointage
1. Capital naturel	
2. Capital humain	
3. Capital social	
4. Capital financier	
5. Capital physique	
<b>Total des points</b>	

## BLM 2.3 - Directives pour les cartes du jeu des moyens de subsistance durable

### Matériel

- Carte de pointage des moyens de subsistance durable pour chaque personne
- Cartes du jeu des moyens de subsistance durable (un jeu de carte par groupe, la face retournée au milieu de la table du groupe)

### Objectif

L'objectif du jeu est d'obtenir des moyens de subsistance durable en accumulant le plus de points possible pour chaque type de capital.

*Note : il est possible d'avoir un total de points positif ou négatif*

### Directives

1. Chacun leur tour, les étudiants tirent une carte de jeu au milieu de la table et la lisent à haute voix aux autres joueurs. Soit l'étudiant ou tous les joueurs ajustent leurs points selon ce qui est indiqué sur la carte. On tire une seule carte par tour et on la garde dans sa propre pile de cartes.
2. Les joueurs tirent des cartes jusqu'à ce qu'il n'y en ait plus.
3. À la fin du jeu, les joueurs calculent le total de leurs points.
4. Ensemble, tous les joueurs déterminent celui ou celle qui a atteint l'existence la plus durable, pouvant ainsi profiter d'une très haute qualité de vie. Les joueurs doivent justifier leur choix.
5. Chaque groupe présente le joueur qui a atteint l'existence la plus durable et explique pourquoi le/la gagnante bénéficie de la plus haute qualité de vie.

## BLM 2.4 - Cartes du jeu des moyens de subsistance durable

<p>Un feu de forêt a ravagé la communauté et réduit l'approvisionnement de nourriture et de carburant de tout le monde.</p> <p><b>Chaque joueur soustrait deux points de leur capital naturel.</b></p>	<p>Une source d'eau potable a été installée dans votre communauté grâce au soutien d'une ONG. Votre point d'eau se trouve à une plus grande proximité et vous êtes en meilleure santé.</p> <p><b>Ajoutez deux points à votre capital naturel et deux points à votre capital humain.</b></p>
<p>Vous avez obtenu un petit prêt grâce au soutien d'une ONG locale, qui a négocié le prêt avec une banque de la ville voisine. Vous créez une petite entreprise avec le capital.</p> <p><b>Ajoutez trois points à votre capital financier.</b></p>	<p>Vous faites un profit avec votre élevage de poules.</p> <p><b>Ajoutez deux points à votre capital financier et un point à votre capital humain.</b></p>
<p>Une nouvelle route a été construite et votre village accède plus facilement au marché et aux services des villes avoisinantes.</p> <p><b>Ajoutez trois points à votre capital physique.</b></p>	<p>Votre père est décédé de la malaria.</p> <p><b>Soustrayez deux points de votre capital social et deux points de votre capital financier.</b></p>
<p>Félicitations ! Vous êtes nouvellement mariés. Votre réseau familial et amical a doublé.</p> <p><b>Ajoutez trois points à votre capital social et un point à votre capital financier.</b></p>	<p>Il y a une grande fête culturelle dans votre village pendant une semaine.</p> <p><b>Ajoutez deux points à votre capital social.</b></p>
<p>Vous avez terminé l'école primaire à 14 ans.</p> <p><b>Ajoutez un point à votre capital humain.</b></p>	<p>Vous venez de terminer l'école secondaire.</p> <p><b>Ajoutez deux points à votre capital humain.</b></p>

## BLM 2.4 Suite - Cartes du jeu des moyens de subsistance durable

<p>Vous venez de terminer l'université/collège. Vous avez plusieurs prêts à rembourser.</p> <p><b>Ajoutez trois points à votre capital humain et soustrayez deux points à votre capital financier.</b></p>	<p>Votre village a été inondé. La route d'accès a été détruite. Vous n'avez aucun moyen de vous rendre au marché pour vendre vos tomates et elles vont pourrir.</p> <p><b>Soustrayez un point de votre capital financier et un point de votre capital physique.</b></p>
<p>Une ONG locale vous donne accès à une nouvelle variété de graines qui résistent mieux à la sécheresse.</p> <p><b>Ajoutez deux points à votre capital physique et un point à votre capital humain.</b></p>	<p>Grâce à l'information et aux aptitudes que vous avez acquises dans un groupe de marketing animé par une ONG locale, vous avez vendu tous vos légumes au marché et obtenu un bon prix.</p> <p><b>Ajoutez trois points à votre capital financier, un point à votre capital social et un point à votre capital humain.</b></p>
<p>Vous avez vendu tout le surplus d'œufs de votre ferme au marché.</p> <p><b>Ajoutez trois points à votre capital financier et un point à votre capital humain.</b></p>	<p>Vous avez planté une nouvelle culture cette année, des fèves de soya, après avoir obtenu des graines par le biais d'une ONG locale. Les feuilles des plantes de soya sont une grande source de protéines pour vos vaches et elles produisent ainsi plus de lait qu'avant. Vous avez vendu le surplus de lait au marché.</p> <p><b>Ajoutez un point à votre capital financier, un point à votre capital humain et un point à votre capital physique.</b></p>

## BLM 2.4 Suite - Cartes du jeu des moyens de subsistance durable

<p>Vous abattez des arbres pour avoir du bois de chauffage et nourrir votre famille.</p> <p><b>Soustrayez deux points de votre capital naturel.</b></p>	<p>Après avoir participé à une séance d'information animée par une ONG locale, vous avez découvert les cuisinières solaires et avez demandé un prêt. Vous utilisez ce type de cuisinière pour faire à manger, ce qui vous permet de gagner du temps, parce que vous n'avez plus à chercher du bois de chauffage. Vous pouvez vous consacrer à d'autres projets.</p> <p><b>Ajoutez deux points à votre capital naturel, un point à votre capital social et un point à votre capital financier.</b></p>
<p>Pendant une séance d'information animée par une ONG locale, vous avez découvert un nouveau type de graine résistant à la sécheresse. Les fermiers y ont obtenu des graines. Même s'il y a eu une sécheresse, les récoltes ont été bonnes pour la communauté. Il y aura presque assez de nourriture pour tout le monde cette année.</p> <p><b>Ajoutez un point au capital humain, un point au capital physique et un point au capital social de tous les joueurs.</b></p>	<p>À cause d'une météo instable, la croissance des cultures est ralentie et moins de nourriture est produite. Les récoltes n'ont pas été bonnes pour la communauté et il n'y aura pas assez de nourriture pour tout le monde cette année.</p> <p><b>Soustrayez un point du capital humain et un point du capital naturel de tous les joueurs.</b></p>
<p>Une nouvelle méthode pour la prévention de l'érosion des sols a été mise en place dans votre ferme. La pente a été terrassée (mise en escalier). Le sol sera plus fertile dans les années à venir et vous pourrez vendre vos récoltes pour gagner de l'argent.</p> <p><b>Ajoutez trois points à votre capital naturel, un point à votre capital humain et deux points à votre capital financier.</b></p>	<p>Votre maison a été endommagée à cause d'une forte pluie. Vous avez dû la reconstruire; elle était fabriquée terre et en foin. Il vous a fallu beaucoup de temps mais le résultat est beau !</p> <p><b>Ajoutez un point à votre capital physique et soustrayez un point à votre capital financier.</b></p>

## BLM 2.4 Suite - Cartes du jeu des moyens de subsistance durable

<p>Par le biais d'une ONG locale, vous avez appris les compétences nécessaires pour créer une entreprise et vendre des œufs de canne. Vous avez aujourd'hui des économies à la banque.</p> <p><b>Ajoutez trois points à votre capital financier, un point à votre capital humain et un point à votre capital social.</b></p>	<p>Vous avez des bonnes relations avec vos voisins et les membres de votre communauté.</p> <p><b>Ajoutez deux points à votre capital social.</b></p>
<p>Vous avez été élu en tant que représentant communautaire au sein du gouvernement local.</p> <p><b>Ajoutez deux points à votre capital social, un point à votre capital humain et un point à votre capital financier.</b></p>	<p>Votre famille est nombreuse et en santé. Étant donné que tout le monde travaille à la ferme, vous produisez assez de cultures pour nourrir votre famille et vendre le surplus.</p> <p><b>Ajoutez deux points à votre capital humain et un point à votre capital financier.</b></p>
<p>Vos enfants sont inscrits dans un pensionnat bien réputé.</p> <p><b>Ajoutez trois points à votre capital humain et soustrayez un point à votre capital financier.</b></p>	<p>Vous êtes propriétaires d'une maison et de terres agricoles.</p> <p><b>Ajoutez deux points à votre capital financier.</b></p>
<p>Une nouvelle taxe a été imposée sur les biens qui sont vendus au marché.</p> <p><b>Soustrayez un point à votre capital financier.</b></p>	<p>Le nouveau gouvernement élu garantit l'éducation primaire pour tous les enfants.</p> <p><b>Ajoutez un point au capital humain de tous les joueurs.</b></p>
<p>Un nouveau gouvernement a été élu et offre des programmes sociaux pour les femmes et les enfants.</p> <p><b>Ajoutez un point au capital social de tous les joueurs.</b></p>	<p>Vous avez planté des arbres pour reboiser une section de la forêt qui avait été défrichée pour les récoltes.</p> <p><b>Ajoutez un point à votre capital naturel et soustrayez un point de votre capital financier.</b></p>

## BLM 2.4 Suite - Cartes du jeu des moyens de subsistance durable

<p>Une ONG vous a aidé à établir un comité d'entretien des puits d'eau afin de pouvoir assurer des réserves d'eau potable pendant plusieurs années.</p> <p><b>Ajoutez un point à votre capital naturel et un point à votre capital social.</b></p>	<p>Une ONG a acquis un réseau d'information dans votre région. On y diffuse des bulletins de météo et on annonce les prix du marché, ce qui vous permet de planifier et de gérer votre ferme et la vente de vos récoltes.</p> <p><b>Ajoutez un point à votre capital social, un point à votre capital humain et deux points à votre capital financier.</b></p>
<p>Un membre de votre famille vous a laissé un héritage.</p> <p><b>Ajoutez un point à votre capital financier et soustrayez un point à votre capital social.</b></p>	<p>Votre famille est tombée malade après avoir bu l'eau d'une rivière avoisinante et ne peut plus travailler.</p> <p><b>Soustrayez un point à votre capital social et un point à votre capital financier.</b></p>
<p>Une rivière a débordé et une grande partie de la terre végétale fertile a été ravinée. Vous avez perdu les éléments nutritifs de la terre végétale qui permettent à vos cultures de pousser. Vous ne produirez pas autant de récoltes que les années précédentes et vous n'aurez pas de surplus à vendre au marché.</p> <p><b>Soustrayez trois points à votre capital naturel et deux points à votre capital financier.</b></p>	<p>Vous avez vendu les outils de votre ferme afin d'acheter des médicaments pour votre fils qui est tombé malade. Grâce aux médicaments, votre fils s'est entièrement rétabli.</p> <p><b>Soustrayez un point à votre capital physique et ajoutez un point à votre capital humain.</b></p>
<p>Vous plantez une nouvelle variété de riz sur votre ferme, grâce aux compétences et au savoir que vous avez acquis auprès d'une ONG locale. La variété vous permet de doubler votre production annuelle. Vous faites un profit avec le surplus que vous vendez.</p> <p><b>Ajoutez un point à votre capital physique, un point à votre capital social et un point à votre capital financier.</b></p>	<p>Vous faites pousser des fèves de soya sur votre ferme pour la première fois. Elles poussent bien. Vous pourrez en faire du tofu et consommer les protéines qui manquaient à votre régime.</p> <p><b>Ajoutez un point à votre capital humain.</b></p>



## BLM 2.4 Suite - Cartes du jeu des moyens de subsistance durable

<p>Vous avez mis en place un nouveau système de gestion antiparasitaire qui vous permet de lutter efficacement contre les nuisibles et d'utiliser moins de pesticides. Vous pouvez ainsi économiser de l'argent et vous en servir pour d'autres projets.</p> <p><b>Ajoutez un point à votre capital naturel, un point à votre capital humain et un point à votre capital financier.</b></p>	<p>Un essaim de locustes (type d'insecte nuisible) s'est attaqué à votre ferme et a dévoré vos cultures. Vous aurez moins de nourriture pour votre famille et aucun surplus à vendre.</p> <p><b>Soustrayez un point à votre capital humain et deux points à votre capital financier.</b></p>
<p>Vous avez tenté de créer une nouvelle entreprise mais avez peu de clients. Vous n'avez pas les moyens de rembourser votre prêt à la banque à temps et les frais de pénalité s'accumulent.</p> <p><b>Soustrayez deux points à votre capital financier.</b></p>	<p>Votre famille et vous êtes analphabètes. Il est très difficile pour vous d'avoir accès à l'information qui vous permettrait d'améliorer vos techniques de gestion agricole.</p> <p><b>Soustrayez deux points de votre capital humain et un point de votre capital financier.</b></p>
<p>Vous possédez des outils agricoles, une pelle et une bêche.</p> <p><b>Ajoutez un point à votre capital physique.</b></p>	<p>Grâce à vos économies, vous avez acheté un buffle d'Asie qui vous permet de labourer les champs et constitue une forme d'économie. Vous pourriez le vendre en cas d'urgence.</p> <p><b>Ajoutez deux points à votre capital physique et deux points à votre capital financier.</b></p>
<p>Votre lopin de terre est très petit et vous êtes incapables de cultiver assez de nourriture pour toute votre famille. Votre famille souffre de la faim et tombe malade.</p> <p><b>Soustrayez un point de votre capital humain.</b></p>	<p>Vous avez réussi à cultiver du riz sur votre terre mais votre famille ne consomme pas tous les éléments nutritifs dont elle a besoin et tombe par conséquent <u>très</u> malade.</p> <p><b>Soustrayez deux points de votre capital humain.</b></p>

## BLM 2.4 Suite - Cartes du jeu des moyens de subsistance durable

<p>Les récoltes ont été très bonnes cette année, mais vous remboursez toujours l'emprunt que vous aviez fait pour acheter des médicaments et amener votre enfant qui était malade à l'hôpital en ville.</p> <p><b>Soustrayez un point de votre capital financier.</b></p>	<p>Vous avez emprunté de l'argent pour acheter une vache. Elle est tombée malade et elle est morte parce que vous ne saviez pas comment la soigner. Comment réussirez-vous à rembourser le prêt ?</p> <p><b>Soustrayez deux points de votre capital financier et un point de votre capital physique.</b></p>
<p>Une ONG locale vous a aidé à obtenir un prêt pour acheter une vache. Elle vous donnera également une formation en nutrition et soins vétérinaires pour ainsi avoir un animal en santé qui produit un maximum de lait. Grâce à celui-ci, vos enfants seront en meilleure santé, vous pourrez vendre le surplus au marché et faire un profit.</p> <p><b>Ajoutez un point à votre capital physique, un point à votre capital financier et un point à votre capital humain.</b></p>	<p>Il y a un haut taux de mortalité dans votre élevage de poules de votre ferme. Vous ne comprenez pas pourquoi et ne savez pas quoi faire, ni qui contacter pour obtenir l'information nécessaire. Vos poules meurent et vous êtes incapables d'en vendre beaucoup.</p> <p><b>Soustrayez deux points de votre capital physique, un point de votre capital humain et deux points de votre capital financier.</b></p>
<p>Votre père est mort du VIH/sida et vous devez quitter l'école pour gérer la ferme familiale. Votre père ne vous a pas enseigné tout ce qu'il fallait savoir sur l'agriculture et vous ne produisez pas assez de nourriture. Auparavant, votre père produisait un surplus à vendre au marché. Votre famille n'a plus assez à manger.</p> <p><b>Soustrayez deux points de votre capital social, deux points de votre capital humain et un point de votre capital financier.</b></p>	<p>Une rivière avoisinante constitue le seul accès d'eau de votre village. Il n'y a pas de système d'assainissement des eaux. Vous tombez malade à cause d'un parasite dans l'eau. Vous ne pouvez pas travailler à la ferme pendant plusieurs jours à cause de la maladie et perdez 10% de vos récoltes. Vous n'aurez pas de surplus à vendre cette année.</p> <p><b>Soustrayez un point de votre capital naturel, deux points de votre capital humain et un point de votre capital financier.</b></p>

## BLM 2.4 Suite - Cartes du jeu des moyens de subsistance durable

Vous habitez au Bangladesh et une grave inondation a raviné vos cultures. Vous n'aurez pas de récoltes cette année et celles des années à venir seront endommagées parce que la terre végétale est perdue et vous manquez de graines.

**Soustrayez deux points de votre capital naturel, un point de votre capital physique et un point de votre capital humain.**

Votre famille tombe malade parce que tout le monde a bu l'eau de la rivière. Vous deviez aller au marché pour vendre vos pois patate mais à cause de la maladie vous n'avez pas pu parcourir la grande distance à pied et vous y rendre. Les pois pourrissent avant que vous ne puissiez les vendre.

**Soustrayez deux points de votre capital humain et un point de votre capital financier.**

## Assessment

Each student's contribution to the class and small group discussions can be observed and recorded anecdotally by the teacher. A rubric is provided that can be used for assessment or evaluation purposes.

### Sustainable Livelihoods — Examining Poverty & Quality of Life

Student's Name: \_\_\_\_\_

Criteria	50-59% (Level 1)	60-69% (Level 2)	70-79% (Level 3)	80-100% (Level 4)
<b>Knowledge/Understanding</b>	Demonstrates limited knowledge and understanding of terms and concepts.	Demonstrates some knowledge and understanding of terms and concepts.	Demonstrates considerable knowledge and understanding of terms and concepts.	Demonstrates thorough knowledge and understanding of terms and concepts.
<b>Thinking/Inquiry</b>	Analysis, decision-making and critical thinking skills are applied with limited effectiveness.	Analysis, decision-making and critical thinking skills are applied with some effectiveness.	Analysis, decision-making and critical thinking skills are applied with considerable effectiveness.	Analysis, decision-making and critical thinking skills are applied with a high degree of effectiveness.
<b>Communication</b>	Expresses and organizes ideas and information with limited effectiveness.	Expresses and organizes ideas and information with some effectiveness.	Expresses and organizes ideas and information with considerable effectiveness.	Expresses and organizes ideas and information with a high degree of effectiveness.

## Glossary

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**Canadian International Development Agency (CIDA):** The federal agency charged with planning and implementing most of Canada's international development program in order to reduce poverty and to contribute to a more secure, equitable and prosperous world.

**Deforestation:** The loss of forests due to over-cutting of trees.

**Developed Country:** A basic classification of countries with a high level of per capita income, industrialization, and modernization. Such countries usually have lower levels of population growth.

**Developing Country:** A basic classification of low- and middle-income countries in which most people have a lower standard of living with access to fewer goods and services than do most people in developed countries.

**Ecological Footprint:** A measure of how much land and water is needed to produce the resources we consume and to dispose of the waste we produce.

**Environmental Degradation:** The change in environmental conditions to a lower condition, quality or level.

**Fair Trade:** A trading method committed to social justice in which employees and farmers are treated and paid fairly, sustainable environmental practices are followed and long-term trade relationships are fostered.

**Food Security:** A state where all people, at all times, have enough food to eat and the food meets their overall nutritional requirements.

**Gender:** Culturally defined roles and responsibilities for females and males that are learned, may change over time, and vary among societies.

**Global Citizenship:** Awareness of the world as a global community and recognizing the rights and responsibilities of citizens to take action with a global consciousness.

**Globalization:** The idea, popularized in the 1960s, that the entire world and its inhabitants are becoming one large community with interconnected needs and services.

**Gross Domestic Product (GDP):** The value of all goods and services produced within a nation in a given year.

**Human Development Index:** An annual ranking of countries in which the health, education, and wealth of each nation's citizens is examined. Life expectancy, educational achievement, and standard of living are measured.

**International Development:** Efforts to assist nations, and their citizens and institutions, to develop a higher quality of living. This is often done through social or economic programs.

**Microfinance** - Small loans that help poor people who wish to start or expand their small businesses but, lack the assets for banks to lend to them; sometimes also called micro-credit.

**Millennium Development Goals:** The eight goals all 191 United Nations member states have agreed to try to achieve by the year 2015.

**Non-Governmental Organization (NGO):** An organization that is not part of the local, state or federal government.

**North American Free Trade Agreement (NAFTA):** An agreement implemented in 1994 committing Canada, the US and Mexico to the elimination of all tariffs, quotas and other trade barriers between them before 2009.

**Poverty:** The state of being without, often associated with need, hardship and lack of resources across a wide range of circumstances.

**Subsistence Agriculture:** A type of farming in which livestock is raised and crops are cultivated for local food and energy requirements rather than for sale.

**Sustainable Development:** Development that meets the needs of the present generation without compromising the ability of future generations to meet their needs.

**Sustainable Livelihood:** The capabilities, assets (including both material and social resources) and activities required for a means of living that can be maintained into the future, recover from shocks and does not compromise natural resources.

**United Nations:** An international organization formed in 1945 to promote peace and economic development.

## Country Information

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For further information on Ghana, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Africa and then Ghana
- CIA Ghana Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Ghana from the dropdown menu
- CIDA Ghana Profile [www.acdi-cida.gc.ca/ghana-e](http://www.acdi-cida.gc.ca/ghana-e)
- Ghana Government Website [www.ghana.gov.gh/](http://www.ghana.gov.gh/)
- CHF Ghana Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Africa, Ghana

For further information on Zimbabwe, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Africa and then Zimbabwe
- CIA Zimbabwe Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Zimbabwe from the dropdown menu
- CIDA Zimbabwe Profile [www.acdi-cida.gc.ca/zimbabwe-e](http://www.acdi-cida.gc.ca/zimbabwe-e)
- Zimbabwe Government Website [www.gta.gov.zw/](http://www.gta.gov.zw/)
- CHF Zimbabwe Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Africa, Zimbabwe

For further information on countries in the Caribbean, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Caribbean
- CIA Profiles of various countries within the Caribbean [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose a country from the dropdown menu
- CIDA Profiles of various countries within the Caribbean (select country name from map) [www.acdi-cida.gc.ca/Americas](http://www.acdi-cida.gc.ca/Americas)
- CHF Guyana Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Americas, Guyana

For further information on Bangladesh, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Asia and then Bangladesh
- CIA Bangladesh Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Bangladesh from the dropdown menu
- CIDA Bangladesh Profile [www.acdi-cida.gc.ca/bangladesh-e](http://www.acdi-cida.gc.ca/bangladesh-e)
- Bangladesh Government Website [www.bangladesh.gov.bd/](http://www.bangladesh.gov.bd/)
- CHF Bangladesh Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Asia, Bangladesh

## Resources

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### Reference Books

Hammond World Atlas 3e, by Hammond, 1999

Worldmark Chronologies, Vol. 1: Chronology of Africa, by Karen Christensen, 1997

### Web Sites

CHF [www.chf-partners.ca](http://www.chf-partners.ca)

Gifts That Matter campaign [www.giftsthatmatter.ca](http://www.giftsthatmatter.ca)

Canadian International Development Agency (See Teacher Zone) [www.acdi-cida.gc.ca](http://www.acdi-cida.gc.ca)

Grameen Bank [www.grameen-info.org/](http://www.grameen-info.org/)

Vancity (Canadian example of microfinance) [www.vancity.com/MyCommunity/](http://www.vancity.com/MyCommunity/)

Nobel Peace Prize Official Site <http://nobelpeaceprize.org/>

Earth Day Network (Quiz) [www.earthday.net/footprint/index.html](http://www.earthday.net/footprint/index.html)

Footprint of Nations [www.ecologicalfootprint.org](http://www.ecologicalfootprint.org)

Global Footprint Network [www.ecofoot.net](http://www.ecofoot.net)

Transfair Canada Website [www.transfair.ca](http://www.transfair.ca)

Make Poverty History Website [www.makepovertyhistory.ca/](http://www.makepovertyhistory.ca/)

World Bank PovertyNet [www.worldbank.org](http://www.worldbank.org) click on "Topics" and then "Poverty"

National Anti-Poverty Organization [www.napo-onap.ca/](http://www.napo-onap.ca/)

The Assembly of First Nations Website: Making Poverty History Article

[www.afn.ca/article.asp?id=2903](http://www.afn.ca/article.asp?id=2903)

United Nations Development Programme: Poverty Reduction [www.undp.org/poverty/](http://www.undp.org/poverty/)

United Nations Development Report Website <http://hdr.undp.org>

Campaign 2000 Website [www.campaign2000.ca/rc/](http://www.campaign2000.ca/rc/)

UN Millennium Development Goals [www.un.org/millenniumgoals/](http://www.un.org/millenniumgoals/)

UN Millennium Project [www.unmillenniumproject.org/](http://www.unmillenniumproject.org/)

Millennium Campaign Website [www.millenniumcampaign.org](http://www.millenniumcampaign.org)

World Bank Student/Teacher Website <http://youthink.worldbank.org/>

Global Education Network [www.global-ed.org](http://www.global-ed.org)

Updated Currency Conversion [www.oanda.com/convert/classic](http://www.oanda.com/convert/classic)



## Summary and Next Steps

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The first step in reducing poverty and injustice in developing countries is to **look deeper** and understand the realities faced and the connections between people around the world. This is an important step in creating empathy for the rural poor in the next generation of leaders — today's students!

This guide was developed to help children understand rural communities in developing countries and some of the forces that perpetuate their cycles of poverty. More importantly, this guide is to give students hope that change is possible. Everyone can contribute to empowering communities to have the resources to be self-sufficient and break their cycle of poverty. (Please see the Head, Heart and Hand Approach on page 4 which highlights the importance of action.)

The second step is to move informed students to action. Students will see how their actions will lead to healthier children, families and communities. Their support will enable families to earn better incomes so they can afford school fees for their children as well as meet other needs. Families will feel empowered and will have more hope for their future.

Your students can help CHF improve the lives of people in rural communities in developing countries by engaging in one of CHF's activities or fundraising events. CHF has many successful stories of schools that are supporting our projects in various developing countries. Visit our web site at [www.chf-partners.ca](http://www.chf-partners.ca) and click on **Teachers** for the latest school success story.

### **CHF encourages your school to get involved!**

Sign up for our Gifts That Matter campaign today! (See page 5 for further information on this campaign).

### **For more information please contact:**

Global Education Coordinator  
CHF  
323 Chapel Street  
Ottawa, Ontario K1N 7Z2  
[gloaled@chf-partners.ca](mailto:gloaled@chf-partners.ca)  
Phone: (613) 237-0180 ext. 229 or 1-866-242-4243



CHF  
*A Deeper Look  
at Poverty*





## Lesson 2: A Deeper Look at Poverty

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### Description

*1x60 minute lesson and 1x20 minute lesson (for group presentations)*

Poverty does not have one simple definition. People from different countries and different people within a community can see poverty in varying ways. In this activity, students explore the many criteria and components of life that can contribute to poverty. They apply their understanding of poverty and use decision-making skills in small groups to rank the order of poverty levels of people described in the case studies, with the ultimate goal of having students understand that poverty is a complex and holistic issue. Students share their rankings with the class and must provide justification for their decisions.

### Subjects

Geography (Grades 7, 8 & 9), Food and Nutrition (Grades 9 & 10), Individual and Family Living (Grades 9 & 10), Civics (Grade 10), Science (Grade 10)

*See the Curriculum Connections section for detailed links to courses and expectations.*

### Materials Needed

Student Handout ([BLM 2.1](#)) case study of Joseph, a person living in poverty in Ethiopia  
Student Handout ([BLM 2.2](#)) case study of Faith, a person living in poverty in Kenya  
Student Handout ([BLM 2.3](#)) case study of Tanh, a person living in poverty in Vietnam  
Student Handout ([BLM 2.4](#)) case study of Fiona, a person living in poverty in Zimbabwe

Note: French BLMs/Student Sheets can be found [here](#).

### Lesson Preparation

1. Make enough photocopies of BLM 2.1-2.4 so that each group will have one copy of each of the four case studies to analyze in Part 2. The number of photocopies will depend on how many groups of four you have in your class.
2. Review the Teacher Background Notes for this lesson. Also see the [Country Information section](#) and [Resources section](#) under [Extra Resources](#). The resources found under the Country Information section can be used to give students further information about Ethiopia, Kenya, Vietnam and Zimbabwe (such as maps, statistics, flags, histories, etc.).

### Teaching/Learning

Part 1: Understanding Poverty in Developing Countries

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1. Have each student take a piece of lined paper and write the question “Why are people poor?” or “What are some of the factors that contribute to poverty?” at the top of the page. Give students five minutes to write down as many reasons as they can. Encourage students to think beyond money. What other types of resources/things are lacking that contribute to people living in poverty.
2. Have students form pairs to share their responses.
3. Have two groups of pairs join together to compare their answers and create a group list without duplication.
4. Call on group members to share responses to form a master class list.
5. Have a brief class discussion about the definition of poverty and some myths (see Teacher Background Notes for this lesson for a definition and summary of myths on poverty). International development organizations, such as CHF, work with people in developing countries to empower people to end their cycle of poverty.
6. Provide the class with the different asset categories (financial, physical, natural, social, human, and political). Using the master class list (from 4 above), list student responses based on these categories. Are there any that do not fit into these asset categories? Does another category have to be made?

## **Part 2: Analyzing Case Study Situations of Poverty**

1. Divide students into groups of four. Distribute one copy of each case study handout (BLM 2.1-2.4) to each group. Instruct students to read each case study aloud in their groups. Each group must then order the case studies from one that represents an individual who is least poor to most poor, and be prepared to justify their decisions. Make sure students understand that the groups may have different responses. The most important thing is that each group must be able to explain why they ordered them as they did. Give students time to discuss in groups.
2. Have each group choose a presenter and share with the class the poverty ranking for their group and explain their reasoning.
3. Have a debriefing discussion with the students.

Debriefing questions:

- Why did different groups rank the people in the case studies differently?
- In your opinion, is the \$1/day or \$2/day poverty line a good way to assess poverty in the world? (For more information see the Teacher Background Notes for this lesson or [www.worldbank.org](http://www.worldbank.org) for the World Bank’s current definition of the Poverty Line).
- Who should determine who is considered poor — individuals themselves or outsiders (government, development agencies)? Why?

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- Who should be responsible for helping people in developing countries out of poverty? (government, NGO's or individuals)
- Do we have any responsibility as Canadians to help other people out of poverty? Why or why not?

Note: These questions require students to voice and justify opinions. Teacher Background Notes provide more information on Canada's role in development and the \$1/day poverty line.

## Extension Activities

- Have students do further research into the issues of poverty within each of the countries from the case studies (Ethiopia, Kenya, Vietnam and Zimbabwe). See Teacher Background Notes from this lesson as well as the [Country Information](#) section.
- Students reflect on the question, "Are the issues of poverty in Canada similar or different to those in developing countries?" and write a journal response.

## Teacher Background Notes

### ***"Why are People Poor?"***

This is a complex question. A person's poverty level depends largely on assets that he/she has or has access to. Assets can be divided into five categories: financial, physical, natural, social and human. Examples for each of the types of assets are listed below:

*Financial:* Savings, credit, other assets that can be cashed in quickly for money (in rural communities, this is often in the form of animals)

*Physical:* Farm and off farm equipment, buildings, machinery, tools, seeds

*Natural:* Land, water, forests, air

*Social:* Social networks, relationships, culture

*Human:* Education, health

Policies and institutions also contribute to or alleviate a person's poverty level. The policies could be at a global level such as the North American Free Trade Agreement (NAFTA), at the national level, the municipal level or the community level. Policies and institutions can often dictate the assets a person has access to.

Another key component that contributes to a person's poverty is extreme shocks or unrest. These could be in the form of:

- Natural disasters such as floods, drought, earthquakes
- Political unrest such as civil wars
- Economic conditions such as a stock market crash
- Technological changes which cause other items or skills to become obsolete and worthless

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## ***Myths about Poverty***

***Myth: People are poor in developing countries because they have too many children.***

False. Families have more children in developing countries because of many factors which include high death rates, lack of access to birth control and the need for labour.

### **Death Rate**

In developing countries, the death rate of children under the age of five years old is very high compared to developed, industrialized nations. In sub-Saharan Africa, child mortality is 17.4% of all live births. After the age of five, there is still a high risk of early death due to malnutrition, disease or illness.

Parents in developing countries realize that not all of their children will live to adulthood and therefore compensate by having more children to ensure some of them will survive long into adulthood. In many developing countries it is the responsibility of the children to care for their parents in their old age. For their future security parents must have many children.

In comparison, the child mortality rate in Canada is very low. The mortality rate for children under five years old in Canada is 0.06%. Parents in Canada can have confidence that, except in very rare circumstances, their children will survive into adulthood and lead full lives.

In Canada, there are many social programs in place for caring for the elderly and the responsibility of care does not fall only on the children. Therefore, there is less need to have more children so that they can care for the elderly.

Retrieved April 9, 2009 from [www.unicef.org](http://www.unicef.org), click on Information by Country

### **Family Planning**

Family planning education is not easily accessible to all rural people in developing countries where services are lacking. Therefore the knowledge of family planning and options available are not well known.

Access to birth control options can be a significant barrier for women in Africa. Women in rural areas without access to towns and services often do not have access to knowledge about birth control options. Even if women know the options, few have the money to afford birth control, if they choose to use it. A family that makes \$1 a day cannot afford birth control that could cost \$16 – 20 a month. Birth control is easily accessible and affordable for most women in Canada.

### **Education**

In Canada, family planning information is easily available for families from local health providers. It is very easy for women in Canada to find out about their family planning choices.

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### Labour

For many societies in the world, especially in developing countries, it is essential that families have many children to help perform all of the labour on the farm to grow food needed for the family to eat. Children provide labour for the farm, which will provide food for the whole family.

Most families in Canada do not farm to produce their own food. The few that do use machinery to perform farm labour rely less on human physical labour.

### ***Myth: People are poor because they don't work hard enough.***

False. The rural poor in developing countries work very hard just to meet their basic needs. There are many barriers that the rural poor face that contribute to their cycle of poverty. A farmer experiencing drought or having fields with poor soil will be unable to harvest a plentiful crop. His hope is that with a lot of hard work he may be able to produce enough food to feed his family for the year. Without performing the farm work, his family will go hungry. There is little choice for most people; they must work very hard for very little gain.

Developing countries often have a high percentage of the population living in rural areas. These areas are often remote without adequate roads. Therefore, even if farmers are able to produce extra food for sale, it can be very challenging to get the food to market for sale. Food can be bulky, perishable and difficult to transport, especially over long distances. The remoteness from markets that many people face is a significant barrier to eliminating poverty.

### ***International Poverty Line - Measuring poverty at the country level***

A common method used to measure poverty is based on incomes or consumption levels. A person is considered poor if his or her consumption or income level falls below some minimum level necessary to meet basic needs. This minimum level is usually called the "poverty line". What is necessary to satisfy basic needs varies across time and societies. Therefore, poverty lines vary in time and place, and each country uses lines which are appropriate to its level of development, societal norms and values. Information on consumption and income is obtained through sample surveys, with which households are asked to answer detailed questions on their spending habits and sources of income. Such surveys are conducted more or less regularly in most countries. These sample survey data collection methods are increasingly being complemented by participatory methods, where people are asked what their basic needs are and what poverty means for them. Interestingly, new research shows a high degree of concordance between poverty lines based on objective and subjective assessments of needs.

### ***International Poverty Line - Measuring poverty at the global level***

When estimating poverty worldwide, the same reference poverty line has to be used, and expressed in a common unit across countries. Therefore, for the purpose of global

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aggregation and comparison, the World Bank uses reference lines set at \$1.25 and \$2 per day (2005 Purchasing Power Parity Terms). The new international poverty line of \$1.25 a day at 2005 prices is the mean of the national poverty lines for the 10-20 poorest countries of the world. It has been estimated that in 2008, approximately 1.4 billion people in the developing world had consumption levels below \$1.25 a day. This new estimate using the updated international poverty line is higher than previous estimates of less than one billion people in the developing world living on less than a dollar a day using 1993 prices; however, the developing world continues to work towards achieving the Millennium Development Goal of cutting extreme poverty in half by 2015.

Progress in Africa has been better since the late 1990s with the share of the region's people living in extreme poverty dropping 4.7 percentage points over five years to 41% in 2004. At the same time high population growth left the same absolute number of poor in 2004 as in 1999, at nearly 300 million. Globally Sub-Saharan Africa now accounts for 30 percent of the world's extreme poor, compared with 19 percent in 1990 and only 11 percent in 1981.

*Retrieved April 9, 2009 from [www.worldbank.org](http://www.worldbank.org) click on Topics, Poverty, Overview and [www.worldbank.org](http://www.worldbank.org) click on Data and Research, Global Monitoring, Global Monitoring Report 2007, Summary/Fact Sheet (entitled Halving Global Poverty by 2015 - A Stocktaking)*

*Visit the World Bank website [www.worldbank.org](http://www.worldbank.org) to see current poverty rates for different countries as well as the definition for the International Poverty Line (click on Topics, Poverty, Overview).*

### ***Canada's Role in Helping People in Developing Countries Out of Poverty***

Canadians are known worldwide for their efforts to eliminate poverty in developing countries. Canadian government, businesses, organizations, institutions and individuals all make contributions to reduce poverty in the world — but is it enough?

The Canadian International Development Agency (CIDA) is the federal agency charged with planning and implementing most of Canada's development cooperation program in order to reduce poverty and to contribute to a more secure, equitable and prosperous world. CIDA supports projects in more than 150 countries, which represent four-fifths of the world's population. CIDA works in partnership with developing countries, Canadian organizations, institutions and businesses, as well as international organizations and agencies.

In the late 1960's, Prime Minister Lester B. Pearson headed an international commission to examine development assistance and propose policies for improvement. The commission called for donor countries, such as Canada, to provide foreign aid equal to 0.7% of its Gross Domestic Product (GDP). Canada accepted that as the target for foreign aid in 1970, but the target has never been met. In 2006, Canadian assistance represented only 0.30% of its Gross National Income (GNI) (Taken from Canada's Performance Report 2006-2007 <http://www.tbs-sct.gc.ca/reports-rapports/cp-rc/2006->

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[2007/ann/ann15-eng.asp#a3Global\\_poverty](http://2007/ann/ann15-eng.asp#a3Global_poverty)). Statistics on Canada's development assistance are available on CIDA's website at: [www.acdi-cida.gc.ca](http://www.acdi-cida.gc.ca).

### ***Further Resources on Poverty***

Make Poverty History Website <http://www.makepovertyhistory.ca/>

World Bank PovertyNet <http://www.worldbank.org> click on "Topics" and then "Poverty"

National Anti-Poverty Organization <http://www.napo-onap.ca/>

Campaign 2000 Website <http://www.campaign2000.ca/rc/>

The Assembly of First Nations Website: Making Poverty History

<http://www.afn.ca/article.asp?id=2903>

United Nations Development Programme: Poverty Reduction

<http://www.undp.org/poverty/>

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## BLM 2.1 – People Living in Poverty

**#1 Name: Joseph**

**Age: 14**

Joseph is a 14 year old boy living in Ethiopia. He has four brothers and eight sisters. Joseph went to school until he was 10 years old. Now he helps his father on their farm.

His family owns five acres of land. Joseph and his four brothers will inherit the farm from his father. The land is of poor quality and the crops they plant do not produce high yields. Soil erosion has occurred on their land and the top soil continues to be washed away during heavy rain storms, making it difficult for crops to grow. The family owns some basic farm tools: two hoes and two shovels. Most years the family grows enough grains and vegetables to satisfy basic food requirements for everyone in their family for the year. There is never extra food produced to sell in the market. Joseph's family has 10 chickens, but no other animals. The vegetables provide the family with an important source of vitamins and minerals. Eggs collected from the hens and the occasional chicken provides some protein for the family.

Joseph and his family are all free from serious illness. His father has back problems from working long days in the fields. Joseph and his siblings also have back pains from working in the fields and stunted growth due to malnutrition.

Joseph's village has a water pump located in the centre of their village that provides safe drinking water and a water council that maintains the village pump when it breaks.





## BLM 2.2 – People Living in Poverty

**#2 Name: Faith**

**Age: 15**

Faith is a 15 year old girl living in Kenya. She has a mother and father, two brothers and two sisters. Her family owns three acres of fertile land which they farm and produce crops such as maize (corn), beans and grains. They have enough farm tools and equipment to perform the work they need including three hoes and two shovels. The family also has 10 chickens that they raise that produce eggs. They provide for the children the much needed protein and vitamins to help keep them healthy. There are also extra eggs that the family sells at the local market.

The money used from the sale of the eggs pays the school fees for Faith's two brothers to attend school. Faith and her sisters do not go to school.

Faith helps her mother perform many chores for the household. There is no local source of water in the village. Faith and others from her village must walk one hour (one way) to a nearby stream to collect water for drinking and cooking. Faith collects the water directly from the stream to use — there is no water treatment system. Although the water is not treated, Faith's family has built up some immunity to the regular bacteria in the water, so most of the time the family is healthy. But, last year Faith's younger sister became very ill and almost died due to a disease transmitted through the drinking water. Luckily, Faith's family had enough money saved from the sale of eggs that they were able to afford to travel to the doctor in town, buy her medicine and have her stay in the hospital for several days.

Faith's brothers will inherit the family farm. Faith is a girl so she is not entitled to own property.



## BLM 2.3 – People Living in Poverty

**# 3   Name: Tanh      Age: 15**

Tanh is a 15 year old boy living in Vietnam. Tanh has a mother and father, three sisters and three brothers. Both Tanh and his younger brother and two of his sisters go to school. His other brother and sister are still too young to go to school.

Tanh's family owns four acres of land. The land is used to grow rice. The soil is of good quality and the family is able to grow enough to eat. There is no excess food to sell. Tanh's father owns a water buffalo and a plough. This is one of the few ploughs in the village, so Tanh's father is hired by other farmers in the community to plough their fields to prepare them for planting. This makes Tanh's father a rich man in the village. If people cannot afford to pay cash to have their fields ploughed, they will often barter and trade vegetables, grains or other items in exchange for having their fields ploughed. Tanh's family also has six ducks and eight chickens that they keep for eggs and meat.

Tanh and his family are healthy. There is a water pump in the village that has clean drinking water. When Tanh became sick last year, the family was able to buy medicine with the money they received from their ploughing business.

Tanh will share with his brothers any inheritance from his family when his father dies. However, his father is strong and healthy and will probably live for many more years.





## BLM 2.4 – People Living in Poverty

**#4 Name: Fiona**

**Age: 17**

Fiona is a seventeen-year-old girl living in Zimbabwe. Both of her parents died of AIDS when she was young. Her brothers and sisters were split up to stay with extended relatives who felt responsible to care for them, despite limited resources. Fiona and her sister, Jacinta, have lived with her uncle, aunt, grandmother and cousins since their parents' death.

Her uncle does not own any land, but has farmed the same small area of land for the last 15 years. Technically, the land belongs to the government, but the land is of poor quality and in a very remote area of the country so they have never been kicked off. Last year, there was good weather during the entire growing season and Fiona's uncle harvested a large crop, enough for all of them to have enough to eat, but nothing extra. This year, there has been little rain and the harvest was smaller than expected. The family will not have enough food to feed everyone for the full year. The family does not own any livestock and does not have any source of income.

Fiona is responsible for performing many of the household responsibilities, including collecting water each day for drinking and cooking, doing laundry, cleaning the house and collecting firewood for cooking. There is no water pump in the village and she must walk several hours each day to collect the daily water. She also helps in the fields during the planting and harvest seasons and helps care for her younger cousins.



## BLM 2.1 – Des gens qui vivent dans la pauvreté

#1 Nom : Joseph

Âge : 14

Joseph est un garçon de 14 ans qui habite en Éthiopie. Il a quatre frères et huit sœurs. Joseph est allé à l'école jusqu'à 10 ans. Aujourd'hui, il aide son père à la ferme.

Sa famille est propriétaire de cinq acres de terre. Joseph et ses quatre frères hériteront de la ferme de leur père. La terre est pauvre et leurs récoltes ont un faible rendement. Les récoltes poussent difficilement parce que le sol de leur terre s'est érodé et les couches supérieures du sol arable se creusent quand il pleut fort. La famille possède quelques outils indispensables : deux bêches et deux pelles. La plupart des années, la famille réussit à faire pousser suffisamment de grain et de légumes pour répondre aux besoins alimentaires de chaque membre. Il n'y a jamais de surplus de nourriture à vendre au marché. La famille de Joseph a dix poules, mais aucun autre animal. Les légumes sont une source importante de minéraux et de vitamines pour la famille. Les œufs de poules et le poulet qu'ils mangent occasionnellement sont une source de protéines pour la famille.

Joseph et sa famille ont été épargnés par la maladie. Par contre, son père a des problèmes au dos à cause des longues journées qu'il passe aux champs. Joseph et ses frères et sœurs ont également des problèmes au dos à cause du travail dans les champs et leur croissance a été ralentie à cause de la malnutrition.

La pompe à eau qui est au centre du village de Joseph fournit de l'eau potable aux habitants et un conseil gère les réparations lorsque la pompe se brise.





## BLM 2.2 – Des gens qui vivent dans la pauvreté

#2    Nom : Faith    Âge : 15

Faith est une fille de 15 ans qui habite au Kenya. Elle a une mère et un père, deux frères et deux sœurs. La famille est propriétaire de trois acres de terre fertile qu'ils cultivent et sur laquelle ils font pousser du maïs, des fèves et du grain. Ils ont suffisamment d'outils et d'équipement, dont trois bêches et deux pelles, pour faire leur travail. Ils ont également 10 poules qui leur produisent des œufs. Ces œufs offrent aux enfants les vitamines et les protéines nécessaires pour qu'ils restent en santé. Il y a aussi un surplus d'œufs que la famille vend au marché.

L'argent qu'ils gagnent en vendant des œufs leur permet de payer les frais de scolarité pour les deux frères de Faith qui vont à l'école. Faith et ses sœurs ne vont pas à l'école.

Faith aide sa mère à faire les tâches ménagères. Il n'y a pas de source d'eau locale dans le village. Pour boire et faire à manger, Faith et d'autres habitants du village doivent marcher une heure (aller) pour aller puiser de l'eau dans une rivière. Faith puise l'eau dont elle a besoin directement dans la source; il n'y a pas de système de traitement des eaux. Même si l'eau n'est pas traitée, les membres de la famille de Faith sont immunisés contre les bactéries qui se trouvent normalement dans l'eau, donc la famille est en santé la plupart du temps. Mais l'année dernière, la petite sœur de Faith est tombée très malade et a failli mourir d'une maladie transmise par l'eau. Heureusement, la famille avait assez d'économies grâce aux œufs vendus. Ils ont pu consulter le médecin de leur village, acheter des médicaments et payer un séjour à l'hôpital pendant plusieurs jours.

Les frères de Faith hériteront de la ferme de leurs parents. Parce qu'elle est une fille, Faith n'a pas le droit d'être propriétaire.



## BLM 2.3 – Des gens qui vivent dans la pauvreté

# 3    Nom : Tanh                    Âge : 15

Tanh est un garçon de 15 ans qui habite au Vietnam. Tanh a une mère et un père, trois sœurs et trois frères. Tanh et son petit frère, ainsi que deux de ses sœurs, vont à l'école. Son autre frère et sœur sont toujours trop jeunes pour aller à l'école.

La famille de Tanh est propriétaire de quatre acres de terre, sur laquelle elle cultive du riz. Le sol est de bonne qualité et la famille récolte suffisamment de riz pour manger. Il n'y a pas de surplus à vendre. Le père de Tanh possède un buffle d'Asie et une charrue, l'une des rares du village. Il est donc embauché par d'autres fermiers de la communauté pour labourer leurs champs et les préparer pour la semence. Grâce à ceci, le père de Tanh est un des hommes riches du village. Si certains n'ont pas les ressources pour payer les frais de labourage, ils échangent et troquent souvent des légumes, du grain ou d'autres denrées en échange du travail. Tanh et sa famille ont également six canards et huit poules qui leur fournissent des œufs et de la viande.

Tanh et sa famille sont en santé. Il y a une pompe à eau dans le village qui leur fournit de l'eau potable. Quand Tanh est tombé malade l'année dernière, sa famille a pu lui acheter des médicaments avec l'argent gagné par l'entreprise de labourage.

Tanh partagera l'héritage de sa famille avec ses frères lorsque son père décèdera. Par contre, son père est fort et en bonne santé donc il lui reste probablement plusieurs années à vivre.





## BLM 2.4 – Des gens qui vivent dans la pauvreté

#4    Nom : Fiona            Âge : 17

Fiona est une fille de dix-sept ans qui habite au Zimbabwe. Ses deux parents sont morts du sida quand elle était jeune. Ses frères et sœurs ont été séparés pour aller habiter avec des membres de la famille élargie qui se sentaient responsables de leur bien-être, malgré leurs ressources limitées. Fiona et sa sœur Jacinta habitent avec leurs oncle, tante, grand-mère et cousins depuis la mort de leurs parents.

Son oncle ne possède pas de terre, mais il cultive le même petit lopin de terre depuis 15 ans. La terre appartient officiellement au gouvernement, mais elle est pauvre et se trouve dans une région éloignée du pays, donc son oncle n'en a jamais été chassé. L'année dernière, la météo a été bonne pendant toute la saison de végétation et l'oncle de Fiona a eu une récolte abondante, qui a permis à tout le monde de manger sans pourtant avoir de surplus. Cette année, il y a eu peu de pluie et la récolte était moins abondante que prévu. La famille n'aura pas assez de nourriture pour tout le monde pendant l'année. La famille n'a pas de bétail et n'a aucune source de revenus.

Fiona est responsable de plusieurs tâches ménagères, comme puiser de l'eau tous les jours pour boire et faire à manger, faire la lessive, nettoyer la maison et chercher du bois pour préparer le repas. Il n'y a pas de pompe à eau dans le village et elle doit marcher plusieurs heures pour en puiser. Elle aide également au champ pendant les saisons de semailles et de récolte et elle s'occupe de ses cousins plus jeunes.



## Assessment

Each student's contributions to the class and small group discussions can be observed and recorded anecdotally by the teacher. A rubric is provided that can be used for assessment/evaluation purposes.

### A Deeper Look at Poverty

Student's Name: \_\_\_\_\_

Evaluator: Teacher: \_\_\_\_ Peer: \_\_\_\_ Self: \_\_\_\_

Criteria	Level 1	Level 2	Level 3	Level 4
<b>Thinking</b>	Analysis and interpretation is limited in effectiveness.  Uses decision-making and problem-solving processes with limited effectiveness.	Analysis and interpretation is moderately effective.  Uses decision-making and problem-solving processes with some effectiveness.	Analysis and interpretation is effective.  Uses decision-making and problem-solving processes with considerable effectiveness.	Analysis and interpretation is highly effective.  Uses decision-making and problem-solving processes with a high degree of effectiveness.
<b>Communication</b>	Expresses and organizes ideas and information with limited effectiveness.	Expresses and organizes ideas and information with some effectiveness.	Expresses and organizes ideas and information with considerable effectiveness.	Expresses and organizes ideas and information with a high degree of effectiveness.

## Glossary

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**Canadian International Development Agency (CIDA):** The federal agency charged with planning and implementing most of Canada's development cooperation program in order to reduce poverty and to contribute to a more secure, equitable and prosperous world.

**Deforestation:** The loss of forests due to over-cutting of trees.

**Developed Country:** A basic classification of countries with a high level of *per capita* income, industrialization and modernization. Such countries usually have lower levels of population growth.

**Developing Country:** A basic classification of low-and middle-income countries in which most people have a lower standard of living with access to fewer goods and services than do most people in developed countries.

**Ecological Footprint:** A measure of how much land and water is needed to produce the resources we consume and to dispose of the waste we produce.

**Environmental Degradation:** The decline of environmental conditions to a lower condition, quality or level.

**Fair Trade:** A trading method committed to social justice in which employees and farmers are treated and paid fairly, sustainable environmental practices are followed and long-term trade relationships are fostered.

**Food Security:** A state where all people, at all times, have enough food to eat and the food meets their overall nutritional requirements.

**Gender:** Culturally defined roles and responsibilities for females and males that are learned, may change over time, and vary among societies.

**Global Citizenship:** Awareness of the world as a global community and recognizing the rights and responsibilities of citizens to take action with a global consciousness.

**Globalization:** The idea, popularized in the 1960s, that the entire world and its inhabitants are becoming one large community with interconnected needs and services.

**Gross Domestic Product (GDP):** The value of all goods and services produced within a nation in a given year.

**Human Development Index:** An annual ranking of countries in which the health, education and wealth of each nation's citizens is examined. Life expectancy, educational achievement and standard of living are measured.

**International Development:** Efforts to assist nations, and their citizens and institutions, to develop a higher quality of living. This is often done through social or economic programs.

**Millennium Development Goals:** The eight goals that all 191 United Nations member states have agreed to try to achieve by the year 2015.

**Non-Governmental Organization (NGO):** An organization that is not part of the local, state or federal government.

**North American Free Trade Agreement (NAFTA):** An agreement implemented in 1994 committing Canada, the US and Mexico to the elimination of all tariffs, quotas and other trade barriers between them before 2009.

**Poverty:** The state of being without, often associated with need, hardship and lack of resources across a wide range of circumstances.

**Subsistence Agriculture:** A type of farming in which livestock is raised and crops are cultivated for local food and energy requirements rather than for sale.

**Sustainable Development:** Development that meets the needs of the present generation without compromising the ability of future generations to meet their needs.

**Sustainable Livelihood:** The capabilities, assets (including both material and social resources) and activities required for a means of living that can be maintained into the future, recover from shocks and does not compromise natural resources.

**United Nations:** An international organization formed in 1945 to promote peace and economic development.

## Country Information

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For further information on Vietnam, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Asia and then Vietnam
- CIA Vietnam Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Vietnam
- CIDA Vietnam Profile [www.acdi-cida.gc.ca/vietnam-e](http://www.acdi-cida.gc.ca/vietnam-e)
- Vietnam Government Website [www.chinhphu.vn](http://www.chinhphu.vn)
- CHF Vietnam Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Asia, Vietnam

For further information on Ghana, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Africa and then Ghana
- CIA Ghana Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Ghana from the dropdown menu
- CIDA Ghana Profile [www.acdi-cida.gc.ca/ghana-e](http://www.acdi-cida.gc.ca/ghana-e)
- Ghana Government Website [www.ghana.gov.gh/](http://www.ghana.gov.gh/)
- CHF Ghana Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Africa, Ghana

For further information on Zimbabwe, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Africa and then Zimbabwe
- CIA Zimbabwe Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Zimbabwe from the dropdown menu
- CIDA Zimbabwe Profile [www.acdi-cida.gc.ca/zimbabwe-e](http://www.acdi-cida.gc.ca/zimbabwe-e)
- Zimbabwe Government Website [www.gta.gov.zw/](http://www.gta.gov.zw/)
- CHF Zimbabwe Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Africa, Zimbabwe

For further information on countries in the Caribbean, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Caribbean
- CIA Profiles of various countries within the Caribbean [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose a country from the dropdown menu
- CIDA Profiles of various countries within the Caribbean (select country name from map) [www.acdi-cida.gc.ca/Americas](http://www.acdi-cida.gc.ca/Americas)
- CHF Guyana Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Americas, Guyana

For further information on Ethiopia, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Africa and then Ethiopia
- CIA Ethiopia Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Ethiopia from the dropdown menu
- CIDA Ethiopia Profile [www.acdi-cida.gc.ca/ethiopia](http://www.acdi-cida.gc.ca/ethiopia)
- Ethiopia Government Website [www.mfa.gov.et/](http://www.mfa.gov.et/)
- CHF Ethiopia Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Africa, Ethiopia

For further information on Kenya, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Africa and then Kenya
- CIA Kenya Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Kenya from the dropdown menu
- CIDA Kenya Profile [www.acdi-cida.gc.ca/kenya-e](http://www.acdi-cida.gc.ca/kenya-e)
- Kenya Government Website [www.kenya.go.ke/](http://www.kenya.go.ke/)
- CHF Kenya Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Africa, Kenya



## Resources

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### Reference Books

Hammond World Atlas 3e, by Hammond, 1999

Worldmark Chronologies, Vol. 1: Chronology of Africa, by Karen Christensen, 1997

### Web Sites

CHF [www.chf-partners.ca](http://www.chf-partners.ca)

Gifts That Matter campaign [www.giftsthatmatter.ca](http://www.giftsthatmatter.ca)

Canadian International Development Agency (See Teacher Zone) [www.acdi-cida.gc.ca](http://www.acdi-cida.gc.ca)

Earth Day Network (Quiz) [www.earthday.net/footprint/index.html](http://www.earthday.net/footprint/index.html)

Footprint of Nations [www.ecologicalfootprint.org](http://www.ecologicalfootprint.org)

Global Footprint Network [www.ecofoot.net](http://www.ecofoot.net)

Transfair Canada Website [www.transfair.ca](http://www.transfair.ca)

Make Poverty History Website [www.makepovertyhistory.ca/](http://www.makepovertyhistory.ca/)

World Bank PovertyNet [www.worldbank.org](http://www.worldbank.org) click on "Topics" and then "Poverty"

National Anti-Poverty Organization [www.napo-onap.ca/](http://www.napo-onap.ca/)

The Assembly of First Nations Website: Making Poverty History Article

[www.afn.ca/article.asp?id=2903](http://www.afn.ca/article.asp?id=2903)

United Nations Development Programme: Poverty Reduction [www.undp.org/poverty/](http://www.undp.org/poverty/)

United Nations Development Report Website <http://hdr.undp.org>

Food and Agriculture Organization of the United Nations (Forestry Information)

[www.fao.org/forestry/en/](http://www.fao.org/forestry/en/)

Campaign 2000 Website [www.campaign2000.ca/rc/](http://www.campaign2000.ca/rc/)

UN Millennium Development Goals [www.un.org/millenniumgoals/](http://www.un.org/millenniumgoals/)

UN Millennium Project [www.unmillenniumproject.org/](http://www.unmillenniumproject.org/)

Millennium Campaign Website <http://endpoverty2015.org/>

World Bank Student/Teacher Website <http://youthink.worldbank.org/>

Global Education Network [www.global-ed.org](http://www.global-ed.org)

Water Resources Commission of Ghana [www.wrc-gh.org](http://www.wrc-gh.org)

Updated Currency Conversion [www.oanda.com/convert/classic](http://www.oanda.com/convert/classic)

## Summary & Next Steps

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The first step in reducing poverty and injustice in developing countries is to **look deeper** and understand the realities faced and the connections between people around the world. This is an important step in creating empathy for the rural poor in the next generation of leaders — today's students!

This guide was developed to help children understand rural communities in developing countries and some of the forces that perpetuate their cycles of poverty. More importantly, this guide is to give students hope that change is possible. Everyone can contribute to empowering communities to have the resources to be self-sufficient and break their cycle of poverty. (Please see the Head, Heart and Hand Approach on page 4 which highlights the importance of action.)

The second step is to move informed students to action. Students will see how their actions will lead to healthier children, families and communities. Their support will enable families to earn better incomes so they can afford school fees for their children as well as meet other needs. Families will feel empowered and will have more hope for their future.

Your students can help CHF improve the lives of people in rural communities in developing countries by engaging in one of CHF's activities or fundraising events. CHF has many successful stories of schools that are supporting our projects in various developing countries. Visit our web site at [www.chf-partners.ca](http://www.chf-partners.ca) and click on **Teachers** for the latest school success story.

### **CHF encourages your school to get involved!**

Sign up for our Gifts That Matter campaign today! (See page 5 for further information on this campaign).

### **For more information please contact:**

Global Education Coordinator  
CHF

323 Chapel Street  
Ottawa, Ontario K1N 7Z2

[gloaled@chf-partners.ca](mailto:gloaled@chf-partners.ca)

Phone: (613) 237-0180 ext. 229 or 1-866-242-4243

CHF

## *The Real Survivor*



ACGC   
Alberta Council for Global Cooperation



## Lesson 3: The Real Survivor

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### Description

*1x60 minute lesson*

Through this interactive game, students are introduced to a range of factors that people living in poor rural communities in developing countries face that contribute to their cycle of poverty. The interactions between environmental, economic, social and political factors are stressed as each student tries to collect enough food to “survive.” Following the game, students analyze the many factors that contribute to food security through discussion and by completing a summary chart and questions.

### Subjects

Science (Grades 7, 8 & 10), Geography (Grades 7 & 9), Business (Grades 9 & 10)

*See the Curriculum Connections section for detailed links to courses and expectations.*

### Materials Needed

Student Handout ([BLM 3.1](#)) Activity Cards

Student Handout ([BLM 3.2](#)) Food Cards

Student Worksheet ([BLM 3.3](#)) Factors that Affect Food Production

Optional: Individually wrapped candy could be used instead of food cards to add excitement to the game and to evoke stronger feelings/responses in the students.

Note: French BLMs/Student Sheets can be found [here](#).

### Lesson Preparation

1. Photocopy the activity cards ([BLM 3.1](#) – six pages) so that each group of 3-4 students will receive a set. Photocopy the food cards ([BLM 3.2](#)) so that each group receives three sheets (or bring in individually wrapped candy). Cut out and laminate both the activity cards and food cards to reuse. Photocopy [BLM 3.3](#) so that each student receives one copy.
2. Review the Teacher Background Notes for this lesson. Also see the [Country Information](#) section and [Resources](#) section under [Extra Resources](#). The resources found under the Country Information can be used to give students further information about the countries that appear on some of the activity cards (such as maps, statistics, flags, histories, etc.).

**CHF is a non-profit organization dedicated to enabling poor rural communities in developing countries to attain sustainable livelihoods, since 1961.**

**[www.chf-partners.ca](http://www.chf-partners.ca)**

## Teaching/Learning

### Part 1: The Real Survivor

1. Divide the students into groups of 4-5 students. Provide a deck of activity cards ([BLM 3.1](#)) face down to each group. Provide a pile of food cards ([BLM 3.2](#)) or treats to each group.
2. Students take turns drawing a card from the deck, reading the card aloud and following the instructions (e.g. take one food card, take no food cards). The students will be taking food cards (or treats) from the middle and putting them in their individual piles unless an activity card tells them otherwise (e.g. give one to the person on your right; put on back in the middle). A student may be asked to give back food cards when they do not have any. Students can keep track of their “debt” and repay when they have enough food cards.
3. In order to “survive,” each person must have at least five food cards (or treats) by the end of the game.
4. Allow time for students to play the game until all of the activity cards have been read once. If students ask for further clarification of rules such as whether sharing, bargaining, stealing, etc are allowed, tell students to decide for themselves. Their choices and consequences will be discussed in the debriefing questions below.
5. Debrief the game by asking the class the following questions.
  - How many survivors are there in the class?
  - How did it feel to have very few food cards?
  - How did it feel to have many food cards?
  - Was anybody in debt?
  - Did anybody share?
  - What were some of the reasons for receiving food cards?
  - What were some of the reasons for losing food cards?
  - What do these reasons tell you about the causes of hunger?
  - What are some environmental protection measures that were seen in this game? Explain them and what affect they had on peoples’ lives.
  - What are some examples of human activity that had a negative effect on the environment? What are the short-term and long-term effects?

### Part 2: Factors that Affect Food Production

1. Have students work individually or in pairs to complete the worksheet Factors that Affect Food Production ([BLM 3.3](#)). Have students use the activity cards they collected during the game as a starting point to fill in the organizer. Students

should use their knowledge beyond the game to list other factors that could affect food production.

2. Once students fill in the worksheet, their answers can be discussed and compared in small groups or as a whole class.

### Sample Answers for Factors that Affect Food Security ([BLM 3.3](#))

#### Factors that Affect Food Security

<p><b>Environmental</b></p> <ul style="list-style-type: none"> <li>- drought</li> <li>- reliable rainfall, at the right time for growing crops</li> <li>- nutrients in soil</li> <li>- extreme weather (floods, hail)</li> <li>- climate (tropical vs. temperate)</li> <li>- deforestation</li> <li>- erosion</li> <li>- insects/pests</li> </ul>	<p><b>Social</b></p> <ul style="list-style-type: none"> <li>- health</li> <li>- access to information (radio, farm extension workers)</li> <li>- education</li> <li>- community cooperation</li> <li>- family</li> <li>- access to land (size, quality, access)</li> <li>- access to labour</li> <li>- access to government programs</li> <li>- access to NGO (non-governmental organization) programs</li> </ul>
<p><b>Economic &amp; Infrastructure</b></p> <ul style="list-style-type: none"> <li>- money to buy food</li> <li>- money to buy tools, seeds, fertilizers or other equipment to improve food production and storage</li> <li>- money to buy animals to diversify food sources and provide pulling power for heavy labour</li> <li>- money to buy medicine to improve health and ability to work</li> <li>- access to loans</li> <li>- good transportation system to move produce to market and to access farm inputs (e.g., seeds, fertilizers, etc.)</li> <li>- markets to buy and sell food</li> <li>- access to land (size, quality)</li> <li>- you own tools, seeds, fertilizer, animals etc.</li> </ul>	<p><b>Political</b></p> <ul style="list-style-type: none"> <li>- war</li> <li>- elections (can cause unrest in countries)</li> <li>- money for country resources (e.g., roads)</li> <li>- government programs to protect farmers (for example, in Ontario farmers can purchase crop insurance)</li> <li>- access to land (size, quality)</li> <li>- access to local, national and international markets</li> <li>- tariffs and taxes</li> </ul>

On a separate sheet of paper, select three factors from the lists above and explain how each of the factors affects food security. See samples on the following page (Responses will vary depending on the level of your students).

## Rainfall

Crops require an adequate amount of rainfall and require it more at specific times during the plant growth (such as seed germination). If rainfall is erratic or unreliable it can lead to decreased crop yields, limiting the amount of food a family has for the year. If rains become regular in an area, signalling the beginning of the rainy season, farmers will plant their crops expecting that the rains will continue to supply their crops with water. However, if rainfall is unpredictable and the rains stop after the farmer has planted, the crop may be very stunted or not germinate at all and require re-planting and more seeds later. This adds more work to the farmers' already busy life, and may cost the farmer money to pay for additional seeds or labour to plough or plant the fields. Unpredictable rainfall often results in very severe rainstorms after a period of no rain. The intense rainfall can cause erosion and flooding and damage fields by washing away topsoil (which contains much-needed nutrients for plant growth), or washing the seeds or small crops away.

## Access to Labour

Having enough labour to perform all of the work to produce a crop is very important. Without adequate labour, a family must reduce the number of fields they plant and the amount of food they grow — leading to less food to supply the family for the year. Farming is dependent on weather conditions, and often work must be done within a limited time period in order for the crop to be successful. For example, the crop must be planted as soon as possible in the rainy season to take full advantage of the rains and result in best crop yield. Often a crop must be harvested quickly to ensure the crop does not rot and can be stored properly.

## Access to Loans

Having access to loans can be a very good way for people to improve their quality of life and ensure food security for the family. By being able to access a loan, a farmer could buy equipment or resources to help his farm production significantly. One example would be a farmer who buys chickens to start producing more chickens and eggs. The eggs and chickens can be eaten by his family, to improve their nutrition, and can be sold to generate a farm income. The money received from selling the eggs and chickens could then be used to pay back the loan and provide the family with a small income. That money could be used in times of food shortage to buy additional food or for other emergencies, such as buying medicines if someone fell ill.

## **Extension Activities**

- Students make a flow chart to show the relationships between some of the factors that affect food production.
- Students write in their journals how environmental, social, political and economic factors affect their lives, showing the interconnections between those factors.



- Students make a board game demonstrating the interconnections between environmental, economic, social and political factors in life.

### **Teacher Background Notes**

Food insecurity and poverty have many interrelated causes. Environmental, social, economic and political factors all contribute to the amount and quality of food that people in poor rural communities in developing countries can access. For further background notes on poverty, see Teacher Background notes in Lesson 2 – A Deeper Look at Poverty.

CHF works to enable poor rural communities in developing countries attain food security and sustainable livelihoods. CHF does this by using a unique approach to development called the Sustainable Livelihoods Approach. CHF looks at the bigger picture and looks deeper past the problems to see opportunities, potential and strengths to recognize the interrelationships and the assets that each community possesses. By improving one component of the community (environmental, social, economic, and political) many other components of life can be improved, as everything is interconnected.

### BLM 3.1 – The Real Survivor Activity Cards

Your mother and father were kidnapped by the secret police. You and your sisters are living with your grandmother, but she has just died. Now you will have to shine shoes on the streets and your sister will become a worker in a factory making computer parts.

**You can afford one food card.**

You live in Ethiopia where a serious drought has occurred. You were participating in a CHF program where you learned to grow drought resistant crops. Your crop survived the drought and will provide your family with food for the rest of the year.

**Take two food cards.**

You are a farmer in Africa. CHF and a local partner organization have developed and distributed a farm magazine to your area that will provide you with new information about how to manage your farm. Having this new information will increase the amount of food you are able to grow.

**Take one food card.**

Your father received free schooling and now has a very good job.

**Take six food cards.**

Your older sister died of HIV/AIDS and now you must quit school to run the family farm. Your sister did not teach you how to do everything on the farm so you are not able to produce as much food as she could. You and your family do not have enough food to eat.

**Give up 4 food cards.**

CHF and an organization from Zimbabwe are running an HIV/AIDS education and prevention program in your village. You and your family participated in the program and have therefore reduced your risk of contracting HIV/AIDS. You will all be healthy to work on the farm this year. This means you can plant the crop, maintain the fields and help with the harvest. As a result you and your family will have plenty of food this year.

**Take two food cards.**

### BLM 3.1 Continued – The Real Survivor Activity Cards

A well has been established in your village. You are now able to water the vegetable garden beside your house. With this extra water, in addition to the rainfall, you produced double the amount of vegetables as last year.

**Take two food cards.**

A well has been established in your village providing clean drinking water. You are now protected from diseases found in the river water that you used to drink. Last year you were sick and tired during the harvest season and your crop rotted while you were sick, leaving you hungry. This year, with the clean water, you are healthy and will be able to spend every day in the fields collecting the harvest.

**Take one food card.**

Your older brother has found a job in a fancy hotel, working as a porter for tourists who come from Europe, the USA and Canada.

**You can afford one food card.**

A new soil conservation method is introduced to farmers in your village. This will reduce the amount of erosion on your fields. As a result, you will have more soil rich in nutrients and the amount of food you produce will increase from last year's yield.

**Take one food card.**

A reforestation project has started near your village. Trees have been planted and are being protected until they are ready to be harvested in a sustainable way (only selected trees each harvest). Having trees near your home will be very helpful because you will not have to walk as far to collect firewood. This will save you three hours each day that you would normally spend walking to the forest very far away. This time can be spent creating a vegetable garden and maintaining it. You will be able to provide more nutritious meals for your family with the vegetables and you can sell the extra vegetables to get money. The money can be used for medicines or school fees.

**Take two food cards.**

You have been given soybean seeds to plant in your fields. Soybeans are nitrogen-fixing plants — that means they can convert nitrogen from the air and put it back into the soil. Nitrogen is an important nutrient for plant growth. The corn crop you plant after the soybeans in the same field will be your best corn crop ever!

**Take one food card.**

### BLM 3.1 Continued – The Real Survivor Activity Cards

A swarm of locusts (a type of insect) has come to your farm. You had a poor crop last year and so you could not afford any pesticides this year. The locusts eat the entire crop.

**Loose all your food cards.**

You have harvested a big crop this year. You would be able to take three food cards if the farm belonged to you, but a rich family who lives 100km away owns the land. They take two thirds of your income as rent.

**Take three food cards from the middle but give two of them to the person with the most food cards.**

Your family's small farm produced very little this year because you could not afford fertilizer costs. The oil companies and fertilizer companies from Northern Countries made record profits.

**Take no food cards.**

You are from Canada and you received loans to attend university. You graduated and got a good paying job. You can afford to go to the grocery store and buy your food however you still have school loans to pay off.

**Take six food cards but give two to the person on your left.**

Your father is the president of a company mining diamonds in Sierra Leone.

**Take ten food cards.**

Your family has created a cooperative farm with other families to grow fair-trade, organic coffee. Your cooperative is working with CHF, and its partners, to understand the coffee market and how to access the market to get the best price for your specialty coffee crop.

**Choose two other people to be in your co-op and divide 6 food cards evenly between the three of you.**

### BLM 3.1 Continued – The Real Survivor Activity Cards

Your family grows coffee. Since the crop was very good this year, there was a surplus, but the coffee buyers from the Northern countries refused to pay the price they paid last year.

**You may have only ONE food card instead of the two you got last year.**

CHF and a partner organization have come to your village and now you pickle cucumbers to sell. CHF has also worked with your community to give you access to information about prices, how to market the product and where to sell them.

**Take one food card.**

Your family has learned new ways to conserve water on your farm from CHF and a partner organization in your home country of Ethiopia. With more water available for your crops, your harvest doubles, giving you enough food to feed your family for the year and sell some extra at the market to earn money.

**Take four food cards.**

There is some weird weather coming your way! Heavy rain and large hail pellets have fallen on your family's farm. The hail pellets damaged much of the crop. Your family will lose 20% of the expected harvest. Last year your family sold some of the crop to earn some money. This year nothing will be sold as the entire crop will be needed to feed your family. Without that money your family will not be able to pay for your school fees, so you will not be able to go to school next year.

**Give up six food cards.**

You are a farmer in Vietnam. CHF and a partner organization in Vietnam have helped you get chickens and learn how to manage them in order to make the most money. You and your neighbour's nutrition improve from eating the eggs, which provide a good source of protein. Your family also starts earning an income from selling extra eggs.

**Take two food cards for your self and take two more food cards and give them to your neighbour on your right.**

Your father becomes very ill and needs medicine that is very expensive. Luckily, your family has two cows. You are able to sell one to earn money to cover the cost of the medicine. However, this means that you will have less money on your farm next year because you only have one cow that will be producing milk that you can sell.

**Give two food cards to the neighbour on your left for medicine.**

### BLM 3.1 Continued – The Real Survivor Activity Cards

A civil war has broken out in your country. As a young man you must leave your farm to fight in the war. Your brothers and father are also fighting in the war. Only your mother and sisters are left at the farm to tend to the fields. Without the help of the entire family the amount of food grown on your farm this year is much less.

**Choose one other person to fight in the civil war with you and both of you must give up 2 food cards.**

Your brothers work on a fishing boat, but the fish they catch are sold to feed the pets of wealthy people.

**Take three food cards but you must give two of them to the person with the most food cards.**

There is a war in the northern part of your country. Your distant family members from the northern area have come to stay with your family. There are many refugees from the north coming to your village because they have nowhere else to go. Your family's food supply which is usually divided among your eight family members must now be divided among 14 people to feed all of your extended family.

**Choose two people to be your extended family. Take all of the food cards that you already have and divide them by 3. Give one third of your food cards to each of your relatives.**

You are a farmer in Ghana. A new variety of beans is introduced on your farm. These new beans are more tolerant of drought. Although there is little rainfall this year, there is enough rain for this new type of bean to produce high yields. Your family has enough beans to feed your family and to sell some at the market to earn money.

**Take one food card.**

Your mother has malaria — a tropical disease. She is ill and unable to harvest the crop on your farm. You must miss school to stay home and harvest the crop. However, without your mother's help, you are unable to harvest all of it before it spoils.

**Put back 3 food cards.**

Your family terraced the hillside of your farm (making it into a hill with many levels that look like steps, rather than one steep slope). This greatly reduced soil erosion. Nutrients in the soil stayed at the top of the hill and were able to supply crops with the nutrients needed for growth. Crop yields on your farm increased.

**Take one food card.**

### BLM 3.1 Continued – The Real Survivor Activity Cards

Your brother has left the family farm to complete college. He is missed on the farm because he knew all of the details about how to grow a good crop and he provided labour. Your crop yields decreased this year because he was not there to help. However, after college, he will get a good job and be able to send money home to the farm. With this money your family will be able to buy chickens and pay for your school fees.

**Take one food card on your next turn.**

Even though your parents are both unemployed, you live in a county where they receive social insurance payments.

**You may have three food cards.**

## BLM 3.2 - Food Cards



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## Food Card



## **BLM 3.3 – Factors that Affect Food Security**

### **What is Food Security?**

Food security is when all people, at all times, have enough food to eat and the food meets their overall nutritional requirements.

### **Factors that Affect Food Security**

<b>Environmental</b>	<b>Social</b>
<b>Economic &amp; Infrastructure</b>	<b>Political</b>

On a separate sheet of paper, select three factors from the lists above and explain how each of the factors affects food security.

### BLM 3.1 – Le vrai survivant, cartes d'apprentissage

<p>Votre mère et votre père ont été enlevés par la police secrète. Vous habitez avec vos sœurs chez votre grand-mère, mais elle vient de mourir. Vous devez maintenant cirer des chaussures dans la rue et votre sœur doit travailler dans une usine qui fabrique des pièces d'ordinateur.</p> <p><b>Vous pouvez acheter une carte alimentaire.</b></p>	<p>Vous habitez en Éthiopie et il y a une grave sécheresse. Vous avez participé à un programme CHF et vous avez appris à cultiver des récoltes qui résistent à la sécheresse. Votre récolte a survécu à la sécheresse et vous pouvez nourrir votre famille pendant le reste de l'année.</p> <p><b>Prenez deux cartes alimentaires.</b></p>
<p>Vous êtes agriculteur en Afrique. CHF et un organisme partenaire local ont produit et distribué une revue sur l'agriculture dans votre région qui vous donnera plus d'information sur la gestion de votre ferme. Cette information augmentera la quantité de nourriture que vous pouvez cultiver.</p> <p><b>Prenez une carte alimentaire.</b></p>	<p>Votre père a pu aller gratuitement à l'école et il a aujourd'hui un très bon travail.</p> <p><b>Prenez six cartes alimentaires.</b></p>
<p>Votre sœur aînée est morte du VIH/sida et vous devez quitter l'école pour gérer la ferme de votre famille. Votre sœur ne vous a pas tout appris sur la ferme et vous ne pouvez pas produire autant de nourriture qu'elle. Votre famille n'a pas assez de nourriture pour manger.</p> <p><b>Remettez quatre cartes alimentaires.</b></p>	<p>CHF et un organisme du Zimbabwe gèrent un programme de prévention du VIH/sida dans votre village. Vous avez participé au programme avec votre famille et courez ainsi moins de risque d'être contaminé par le VIH/sida. Vous serez en santé pour travailler à la ferme cette année. Vous pouvez donc planter les semences, entretenir le champ et aider à la récolte. Vous et votre famille aurez donc assez de nourriture cette année.</p> <p><b>Prenez deux cartes alimentaires.</b></p>

### BLM 3.1 suite - Le vrai survivant, cartes d'apprentissage

Un puits a été construit dans votre village. Vous pouvez arroser le potager à côté de votre maison. Avec l'eau que vous avez en plus de la pluie, vous avez doublé la quantité de légumes de l'année dernière.

**Prenez deux cartes alimentaires.**

Un puits a été construit dans votre village et fournit de l'eau potable. Vous êtes maintenant à l'abri des maladies transmises par l'eau de la rivière que vous buviez auparavant. L'année dernière, vous avez été malade et fatigué pendant les récoltes et vos cultures ont pourri pendant que vous étiez malade. Vous avez souffert de la faim. Cette année, avec l'eau potable, vous êtes en santé et pouvez aller tous les jours au champ pour récolter vos cultures.

**Prenez une carte alimentaire.**

Votre frère a trouvé du travail dans un hôtel de luxe, comme portier, pour les touristes qui viennent d'Europe, des États-Unis et du Canada.

**Prenez une carte alimentaire.**

Une nouvelle méthode de préservation des sols a été présentée aux fermiers de votre village. Il y aura donc moins d'érosion dans les sols, qui auront une plus grande quantité d'éléments nutritifs, et vous produirez ainsi plus de nourriture par rapport au rendement de l'année dernière.

**Prenez une carte alimentaire.**

Il y a un projet de reforestation près de votre village. Des arbres ont été plantés et seront protégés jusqu'à ce qu'ils puissent être exploités de manière durable (certains arbres uniquement pendant les récoltes). Il vous sera utile d'avoir un arbre près de la maison parce que vous n'aurez plus à marcher pour trouver du bois de chauffage. Vous gagnerez les trois heures par jour qu'il vous fallait pour vous rendre dans la forêt. Le temps épargné vous permettra de faire un potager et de l'entretenir. Vous pourrez préparer des repas plus nutritifs pour votre famille grâce aux légumes et vous pourrez vendre le surplus pour faire de l'argent. Cet argent servira aux frais de scolarité et aux médicaments.

**Prenez deux cartes alimentaires.**

On vous a donné des graines de soya à planter dans vos champs. Le soya est une plante fixatrice d'azote, ce qui veut dire qu'elle transforme l'azote de l'air et le renvoie dans le sol. L'azote est un élément nutritif important pour la croissance des plantes. Les cultures de maïs que vous planterez après le soya dans le même champ seront les meilleures que vous n'aurez jamais eues!

**Prenez une carte alimentaire.**

### BLM 3.1 suite - Le vrai survivant, cartes d'apprentissage

<p>Un essaim de locustes (un type d'insecte) a attaqué votre ferme. La récolte a été mauvaise l'année dernière et vous n'avez pas pu acheter de pesticide cette année. Les locustes ont mangé toute la récolte.</p> <p><b>Vous perdez toutes vos cartes alimentaires.</b></p>	<p>Votre récolte était abondante cette année. Vous pourriez obtenir trois bonnes cartes si la ferme vous appartenait, mais la terre appartient à une riche famille qui habite à 100km. Ils prennent les deux tiers de votre revenu comme loyer.</p> <p><b>Prenez trois cartes du centre, mais donnez-en deux à la personne qui a le plus de cartes alimentaires.</b></p>
<p>La petite ferme de votre famille a produit très peu cette année parce que vous ne pouviez pas acheter d'engrais. Les compagnies pétrolières et qui fabriquent de l'engrais dans les pays du Nord font des bénéfices records.</p> <p><b>Vous ne pouvez pas prendre de carte alimentaire.</b></p>	<p>Vous venez du Canada et vous avez obtenu un prêt universitaire. Vous avez été diplômé et trouvé un bon travail. Vous avez les moyens d'aller au supermarché et d'acheter de la nourriture même si vous devez rembourser votre prêt.</p> <p><b>Prenez six cartes alimentaires, mais donnez-en deux à la personne de votre gauche.</b></p>
<p>Votre père est président d'une mine de diamant à la Sierra Leone.</p> <p><b>Prenez dix cartes alimentaires.</b></p>	<p>Votre famille a créé une ferme coopérative avec d'autres familles pour cultiver du café équitable et biologique. Votre coopérative travaille avec CHF et ses partenaires pour mieux connaître le marché du café et savoir comment obtenir le meilleur prix pour vos récoltes de café spécialisé.</p> <p><b>Choisissez deux personnes pour votre coopérative et partagez équitablement six cartes alimentaires entre vous trois.</b></p>

### BLM 3.1 suite - Le vrai survivant, cartes d'apprentissage

Votre famille cultive du café. Puisque les récoltes ont été bonnes cette année, il y a eu un surplus, mais les acheteurs des pays du Nord refusent de payer le prix de l'année dernière.

**Prenez UNE seule carte alimentaire au lieu des deux de l'année dernière.**

CHF et un organisme partenaire sont venus dans votre village et aujourd'hui vous marinez des cornichons pour les vendre. CHF travaille également avec votre communauté pour vous donner accès à de l'information sur les prix, la commercialisation du produit et où le vendre.

**Prenez une carte alimentaire.**

Grâce à CHF et un organisme partenaire en Éthiopie, votre famille a appris des nouvelles techniques pour préserver l'eau de la ferme. Comme vous avez plus d'eau, vos récoltes ont doublé, ce qui vous a donné suffisamment de nourriture pour nourrir votre famille pendant l'année et vendre le surplus au marché pour faire l'argent.

**Prenez quatre cartes alimentaires.**

On prédit une météo étrange chez vous ! Une pluie torrentielle et des grêlons sont tombés sur la ferme de votre famille. La grêle a endommagé la plus grande partie de la récolte. Votre famille perdra 20% de la récolte prévue. L'année dernière votre famille a vendu une partie de la récolte pour faire de l'argent. Aucune partie de la récolte ne sera vendue cette année parce qu'il faut tout garder pour nourrir la famille. Sans l'argent, votre famille ne pourra pas payer les frais de scolarité, donc vous ne pourrez pas aller à l'école l'an prochain.

**Remettez six cartes alimentaires.**

Vous êtes agriculteur au Vietnam. CHF et un organisme partenaire au Vietnam vous ont aidé à obtenir des poules et à apprendre comment les gérer pour faire un profit maximum. Votre alimentation et celle de votre voisin se sont améliorées grâce aux œufs, qui sont une bonne source de protéines. Les œufs supplémentaires qui sont vendus assurent un revenu à votre famille.

**Prenez deux cartes pour vous et prenez-en deux autres pour donner à votre voisin de droite.**

Votre père tombe très malade et doit prendre des médicaments qui coûtent très cher. Heureusement, votre famille a deux vaches. Vous pouvez en vendre une et l'argent vous permet d'acheter les médicaments. Par contre, vous aurez moins d'argent l'année prochaine pour la ferme comme il ne vous reste qu'une vache pour produire du lait et le vendre.

**Donnez deux cartes alimentaires à votre voisin de droite pour les médicaments.**

### BLM 3.1 suite - Le vrai survivant, cartes d'apprentissage

Une guerre civile éclate dans votre pays. En tant que jeune homme vous devez quitter la ferme pour aller à la guerre. Vos frères et votre père doivent également aller à la guerre. Il ne reste plus que votre mère et vos sœurs à la ferme pour s'occuper des champs. Vous avez beaucoup moins de récoltes cette année sans l'aide de la famille entière.

**Choisissez une personne pour aller à la guerre avec vous et vous devez tous les deux remettre deux cartes alimentaires.**

Vos frères travaillent sur un bateau de pêche, mais les poissons qu'ils attrapent sont vendus pour nourrir les animaux de compagnie des habitants riches.

**Prenez trois cartes alimentaires, mais donnez-en deux à la personne qui a le plus de cartes alimentaires.**

Il y a une guerre dans le nord de votre pays. Les membres de votre famille élargie qui y habitent sont venus habiter avec vous. Plusieurs réfugiés du Nord viennent dans votre village parce qu'ils n'ont pas d'autre endroit. Les vivres de votre famille qui sont normalement partagés entre les huit membres de votre famille doivent maintenant être partagés entre 14 personnes pour nourrir toute votre famille élargie.

**Choisissez deux personnes comme membres de votre famille élargie. Prenez toutes les cartes alimentaires que vous avez et divisez-les en 3. Donnez un tiers de vos cartes à chaque membre de votre famille.**

Vous êtes agriculteur au Ghana. Une nouvelle variété de fèves est introduite dans votre ferme. Celles-ci tolèrent mieux la sécheresse. Même s'il n'a pas beaucoup plu cette année, c'est suffisant pour obtenir un bon rendement dans les récoltes. Votre famille a assez de fèves pour nourrir toute votre famille et pour en vendre et faire de l'argent.

**Prenez une carte alimentaire.**

Votre mère a la malaria, une maladie tropicale. Elle est malade et ne peut récolter les cultures de votre ferme. Vous devez vous absenter de l'école pour faire les récoltes. Par contre, sans l'aide de votre mère vous êtes incapable de terminer avant qu'une partie des récoltes ne pourrisse.

**Remettez trois cartes alimentaires.**

Votre famille a terrassé la colline de votre ferme (en créant plusieurs niveaux qui ressemblent à des escaliers, plutôt qu'une pente). Ceci a beaucoup réduit l'érosion. Les éléments nutritifs du sol sont restés dans le sol vers le haut de la colline, ce qui a donné aux cultures les éléments nutritifs nécessaires pour la récolte. Vos récoltes ont augmenté.

**Prenez une carte alimentaire.**

### BLM 3.1 suite - Le vrai survivant, cartes d'apprentissage

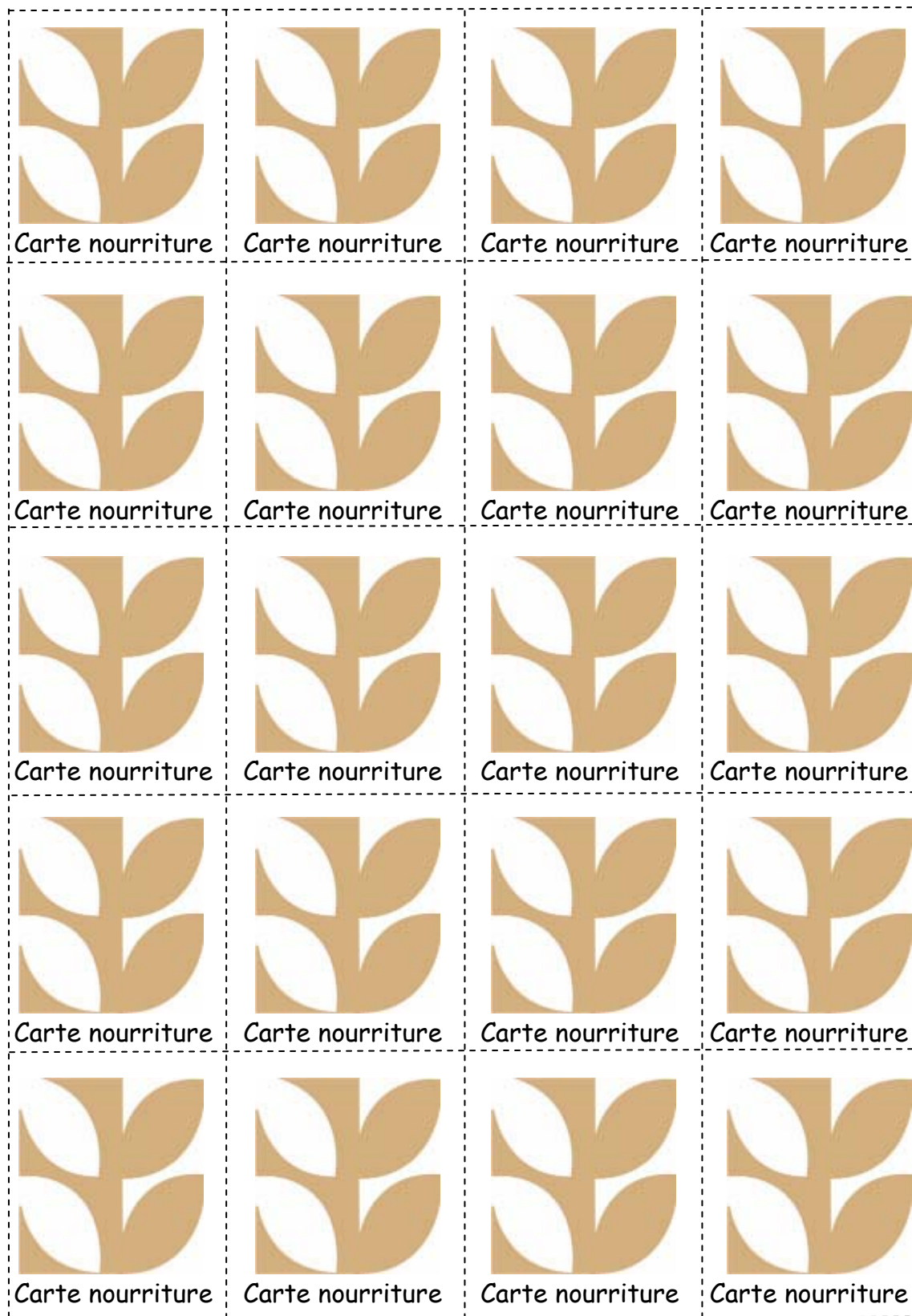
Votre frère a quitté la ferme familiale pour terminer ses études. Sa présence manque parce qu'il connaissait tout ce qu'il fallait savoir pour obtenir de bonnes cultures et il servait au labourage. Vos récoltes ont diminué cette année parce qu'il n'était pas là. Par contre, après ses études, il trouvera du travail et pourra envoyer de l'argent à la ferme. Grâce à cet argent, votre famille pourra acheter des poules et payer vos frais de scolarité.

**Prenez une carte alimentaire à votre prochain tour.**

Même si vos deux parents sont sans emploi, vous habitez dans un pays où ils bénéficient d'une assurance sociale.

**Prenez trois cartes alimentaires.**

### BLM 3.2 - Cartes nourriture





### **BLM 3.3 – Les facteurs qui influencent la sécurité des aliments**

#### **Qu'est-ce que la sécurité des aliments ?**

La sécurité des aliments concerne les facteurs qui permettent à chaque personne d'avoir suffisamment de nourriture en tout temps. Cette nourriture doit répondre à l'ensemble de ses besoins alimentaires.

#### **Les facteurs qui influencent la sécurité des aliments**

<b>Environnement</b>	<b>Social</b>
<b>Économique et infrastructure</b>	<b>Politique</b>

Prenez une feuille de papier et choisissez trois facteurs dans la liste ci-dessus. Expliquez comment ces facteurs influencent la sécurité des aliments.

## Assessment

Each student's contributions to the class and small group discussions can be observed and recorded anecdotally by the teacher. A rubric is provided that can be used for assessment/evaluation purposes of the Factors that Affect Food Security worksheet (BLM 3.3).

## The Real Survivor

Student's Name: \_\_\_\_\_

Evaluator: Teacher: \_\_\_\_ Peer: \_\_\_\_ Self: \_\_\_\_

Criteria	Level 1	Level 2	Level 3	Level 4
<b>Knowledge/ Understanding</b>	Demonstrates limited knowledge and understanding of concepts.	Demonstrates some knowledge and understanding of concepts.	Demonstrates considerable knowledge and understanding of concepts.	Demonstrates thorough knowledge and understanding of concepts.
<b>Communication</b>	Expresses and organizes ideas and information with limited effectiveness.  Uses language conventions and terminology with limited effectiveness.	Expresses and organizes ideas and information with some effectiveness.  Uses language conventions and terminology with some effectiveness.	Expresses and organizes ideas and information with considerable effectiveness.  Uses language conventions and terminology with considerable effectiveness.	Expresses and organizes ideas and information with a high degree of effectiveness.  Uses language conventions and terminology with a high degree of effectiveness.
<b>Application</b>	Makes connections between contexts (environmental; social; cultural) with limited effectiveness.	Makes connections between contexts (environmental; social; cultural) with some effectiveness.	Makes connections between contexts (environmental; social; cultural) with considerable effectiveness.	Makes connections between contexts (environmental; social; cultural) with a high degree of effectiveness.

## Glossary

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**Canadian International Development Agency (CIDA):** The federal agency charged with planning and implementing most of Canada's development cooperation program in order to reduce poverty and to contribute to a more secure, equitable and prosperous world.

**Deforestation:** The loss of forests due to over-cutting of trees.

**Developed Country:** A basic classification of countries with a high level of *per capita* income, industrialization and modernization. Such countries usually have lower levels of population growth.

**Developing Country:** A basic classification of low-and middle-income countries in which most people have a lower standard of living with access to fewer goods and services than do most people in developed countries.

**Ecological Footprint:** A measure of how much land and water is needed to produce the resources we consume and to dispose of the waste we produce.

**Environmental Degradation:** The decline of environmental conditions to a lower condition, quality or level.

**Fair Trade:** A trading method committed to social justice in which employees and farmers are treated and paid fairly, sustainable environmental practices are followed and long-term trade relationships are fostered.

**Food Security:** A state where all people, at all times, have enough food to eat and the food meets their overall nutritional requirements.

**Gender:** Culturally defined roles and responsibilities for females and males that are learned, may change over time, and vary among societies.

**Global Citizenship:** Awareness of the world as a global community and recognizing the rights and responsibilities of citizens to take action with a global consciousness.

**Globalization:** The idea, popularized in the 1960s, that the entire world and its inhabitants are becoming one large community with interconnected needs and services.

**Gross Domestic Product (GDP):** The value of all goods and services produced within a nation in a given year.

**Human Development Index:** An annual ranking of countries in which the health, education and wealth of each nation's citizens is examined. Life expectancy, educational achievement and standard of living are measured.

**International Development:** Efforts to assist nations, and their citizens and institutions, to develop a higher quality of living. This is often done through social or economic programs.

**Millennium Development Goals:** The eight goals that all 191 United Nations member states have agreed to try to achieve by the year 2015.

**Non-Governmental Organization (NGO):** An organization that is not part of the local, state or federal government.

**North American Free Trade Agreement (NAFTA):** An agreement implemented in 1994 committing Canada, the US and Mexico to the elimination of all tariffs, quotas and other trade barriers between them before 2009.

**Poverty:** The state of being without, often associated with need, hardship and lack of resources across a wide range of circumstances.

**Subsistence Agriculture:** A type of farming in which livestock is raised and crops are cultivated for local food and energy requirements rather than for sale.

**Sustainable Development:** Development that meets the needs of the present generation without compromising the ability of future generations to meet their needs.

**Sustainable Livelihood:** The capabilities, assets (including both material and social resources) and activities required for a means of living that can be maintained into the future, recover from shocks and does not compromise natural resources.

**United Nations:** An international organization formed in 1945 to promote peace and economic development.

## Country Information

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For further information on Vietnam, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Asia and then Vietnam
- CIA Vietnam Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Vietnam
- CIDA Vietnam Profile [www.acdi-cida.gc.ca/vietnam-e](http://www.acdi-cida.gc.ca/vietnam-e)
- Vietnam Government Website [www.chinhphu.vn](http://www.chinhphu.vn)
- CHF Vietnam Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Asia, Vietnam

For further information on Ghana, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Africa and then Ghana
- CIA Ghana Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Ghana from the dropdown menu
- CIDA Ghana Profile [www.acdi-cida.gc.ca/ghana-e](http://www.acdi-cida.gc.ca/ghana-e)
- Ghana Government Website [www.ghana.gov.gh/](http://www.ghana.gov.gh/)
- CHF Ghana Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Africa, Ghana

For further information on Zimbabwe, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Africa and then Zimbabwe
- CIA Zimbabwe Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Zimbabwe from the dropdown menu
- CIDA Zimbabwe Profile [www.acdi-cida.gc.ca/zimbabwe-e](http://www.acdi-cida.gc.ca/zimbabwe-e)
- Zimbabwe Government Website [www.gta.gov.zw/](http://www.gta.gov.zw/)
- CHF Zimbabwe Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Africa, Zimbabwe

For further information on countries in the Caribbean, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Caribbean
- CIA Profiles of various countries within the Caribbean [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose a country from the dropdown menu
- CIDA Profiles of various countries within the Caribbean (select country name from map) [www.acdi-cida.gc.ca/Americas](http://www.acdi-cida.gc.ca/Americas)
- CHF Guyana Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Americas, Guyana

For further information on Ethiopia, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Africa and then Ethiopia
- CIA Ethiopia Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Ethiopia from the dropdown menu
- CIDA Ethiopia Profile [www.acdi-cida.gc.ca/ethiopia](http://www.acdi-cida.gc.ca/ethiopia)
- Ethiopia Government Website [www.mfa.gov.et/](http://www.mfa.gov.et/)
- CHF Ethiopia Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Africa, Ethiopia

For further information on Kenya, please see the following resources:

- World Atlas Website [www.worldatlas.com](http://www.worldatlas.com) click on Africa and then Kenya
- CIA Kenya Profile [www.cia.gov](http://www.cia.gov) click on World Factbook and then choose Kenya from the dropdown menu
- CIDA Kenya Profile [www.acdi-cida.gc.ca/kenya-e](http://www.acdi-cida.gc.ca/kenya-e)
- Kenya Government Website [www.kenya.go.ke/](http://www.kenya.go.ke/)
- CHF Kenya Project Description [www.chf-partners.ca](http://www.chf-partners.ca) click on Our Projects, Africa, Kenya

## Resources

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### Reference Books

Hammond World Atlas 3e, by Hammond, 1999

Worldmark Chronologies, Vol. 1: Chronology of Africa, by Karen Christensen, 1997

### Web Sites

CHF [www.chf-partners.ca](http://www.chf-partners.ca)

Gifts That Matter campaign [www.giftsthatmatter.ca](http://www.giftsthatmatter.ca)

Canadian International Development Agency (See Teacher Zone) [www.acdi-cida.gc.ca](http://www.acdi-cida.gc.ca)

Earth Day Network (Quiz) [www.earthday.net/footprint/index.html](http://www.earthday.net/footprint/index.html)

Footprint of Nations [www.ecologicalfootprint.org](http://www.ecologicalfootprint.org)

Global Footprint Network [www.ecofoot.net](http://www.ecofoot.net)

Transfair Canada Website [www.transfair.ca](http://www.transfair.ca)

Make Poverty History Website [www.makepovertyhistory.ca/](http://www.makepovertyhistory.ca/)

World Bank PovertyNet [www.worldbank.org](http://www.worldbank.org) click on "Topics" and then "Poverty"

National Anti-Poverty Organization [www.napo-onap.ca/](http://www.napo-onap.ca/)

The Assembly of First Nations Website: Making Poverty History Article

[www.afn.ca/article.asp?id=2903](http://www.afn.ca/article.asp?id=2903)

United Nations Development Programme: Poverty Reduction [www.undp.org/poverty/](http://www.undp.org/poverty/)

United Nations Development Report Website <http://hdr.undp.org>

Food and Agriculture Organization of the United Nations (Forestry Information)

[www.fao.org/forestry/en/](http://www.fao.org/forestry/en/)

Campaign 2000 Website [www.campaign2000.ca/rc/](http://www.campaign2000.ca/rc/)

UN Millennium Development Goals [www.un.org/millenniumgoals/](http://www.un.org/millenniumgoals/)

UN Millennium Project [www.unmillenniumproject.org/](http://www.unmillenniumproject.org/)

Millennium Campaign Website <http://endpoverty2015.org/>

World Bank Student/Teacher Website <http://youthink.worldbank.org/>

Global Education Network [www.global-ed.org](http://www.global-ed.org)

Water Resources Commission of Ghana [www.wrc-gh.org](http://www.wrc-gh.org)

Updated Currency Conversion [www.oanda.com/convert/classic](http://www.oanda.com/convert/classic)

## Summary & Next Steps

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The first step in reducing poverty and injustice in developing countries is to **look deeper** and understand the realities faced and the connections between people around the world. This is an important step in creating empathy for the rural poor in the next generation of leaders — today's students!

This guide was developed to help children understand rural communities in developing countries and some of the forces that perpetuate their cycles of poverty. More importantly, this guide is to give students hope that change is possible. Everyone can contribute to empowering communities to have the resources to be self-sufficient and break their cycle of poverty. (Please see the Head, Heart and Hand Approach on page 4 which highlights the importance of action.)

The second step is to move informed students to action. Students will see how their actions will lead to healthier children, families and communities. Their support will enable families to earn better incomes so they can afford school fees for their children as well as meet other needs. Families will feel empowered and will have more hope for their future.

Your students can help CHF improve the lives of people in rural communities in developing countries by engaging in one of CHF's activities or fundraising events. CHF has many successful stories of schools that are supporting our projects in various developing countries. Visit our web site at [www.chf-partners.ca](http://www.chf-partners.ca) and click on **Teachers** for the latest school success story.

### **CHF encourages your school to get involved!**

Sign up for our Gifts That Matter campaign today! (See page 5 for further information on this campaign).

### **For more information please contact:**

Global Education Coordinator  
CHF

323 Chapel Street  
Ottawa, Ontario K1N 7Z2

[gloaled@chf-partners.ca](mailto:gloaled@chf-partners.ca)

Phone: (613) 237-0180 ext. 229 or 1-866-242-4243



UNICEF

*An Introduction  
to Malaria*





# AN INTRODUCTION TO MALARIA



A curriculum resource for secondary teachers

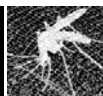
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Prepared by:  
Claire Pitt, UNICEF Canada  
Erin Sperling, Ontario Institute  
for Studies in Education/  
University of Toronto

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# MALARIA MINI-UNIT



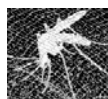
## DESCRIPTION

This mini-unit has been developed to provide secondary teachers with an introductory package of lesson plans about malaria. Malaria is a significant health and development concern facing millions of people — it is the largest cause of child mortality in Africa and its control and prevention are part of the United Nations Millennium Development Goals (MDGs). Controlling malaria is a critical key to breaking the cycle of poverty in developing countries. Malaria is increasing largely as a result of environmental degradation and change, but is preventable and treatable. As a critical global issue with curriculum links to environmental and world studies and science, malaria deserves some time and attention in the classroom. The lessons in this mini-unit can stand alone but are better used as a sequence of three so that students develop an understanding of both the science of malaria infection and the socio-economic impacts the disease has worldwide. Students can also pursue responsive action through UNICEF.

## SAMPLE CURRICULUM LINKS (Ontario Secondary)

SOCIAL SCIENCES AND HUMANITIES	
<p><b>HPW 3C Living and Working with Children</b></p> <ul style="list-style-type: none"><li>Propose solutions to problems that are detrimental to the healthy development of children</li></ul>	<p><b>HHG 4M Issues in Human Growth and Development</b></p> <ul style="list-style-type: none"><li>Explain the relationship between maternal health and well-being and brain development in the child</li><li>Demonstrate an understanding of the effects that various economic, political and social factors can have on human development</li><li>Identify and evaluate ways to prevent these factors from negatively affecting human growth and development</li></ul>
<p><b>HIP 3E Managing Personal and Family Resources</b></p> <ul style="list-style-type: none"><li>Identify resources that influence the wealth or poverty of communities and nations</li></ul>	<p><b>HSB 4M Challenge and Change</b></p> <ul style="list-style-type: none"><li>Discuss cultural, psychological and sociological barriers to accessing health care</li><li>Analyse the social structures that support, and those that weaken, global inequalities</li></ul>
<p><b>HLS 3O Living Spaces and Shelter</b></p> <ul style="list-style-type: none"><li>Describe the consequences of unsolved housing problems</li></ul>	
<p><b>HFA 4M Food and Nutrition</b></p> <ul style="list-style-type: none"><li>Describe economic factors that have an impact on the food choices of families and individuals</li><li>Identify the social conditions that contribute to the incidence of illness and disease</li></ul>	
<p><b>HHS 4M Individuals and Families in a Diverse Society</b></p> <ul style="list-style-type: none"><li>Analyse changes in labour-force participation</li><li>Demonstrate an understanding of the effect of various aspects of social systems on individual development</li></ul>	
HEALTH AND PHYSICAL EDUCATION	
	<p><b>PPZ 3O Health for Life</b></p> <ul style="list-style-type: none"><li>Analyse the environmental factors that affect personal health</li><li>Describe environmental influences on health on the local, national and global levels</li></ul>

SCIENCE			
<p><b>SBI 3U Biology</b></p> <ul style="list-style-type: none"> <li>• Compare and contrast the life cycles of representative organisms from each life kingdom</li> </ul> <p><b>SBI 3C Biology</b></p> <ul style="list-style-type: none"> <li>• Evaluate the effects of large-scale use of fungicides and pesticides on the diversity of micro-organisms</li> </ul> <p><b>SBI 4U Biology</b></p> <ul style="list-style-type: none"> <li>• Outline the advances in medical care and technology that have contributed to an increase in life expectancy and relate these developments to demographic issues</li> </ul> <p><b>SNC 3M Science</b></p> <ul style="list-style-type: none"> <li>• Demonstrate, through their own research and its presentation, an understanding of ethical, environmental and economic issues that involve various viewpoints on the use of technologies in everyday life</li> <li>• Assess the costs and benefits to society of recent technologies</li> </ul> <p><b>SNC 3E Science</b></p> <ul style="list-style-type: none"> <li>• Describe how bacteria, protists, viruses and fungi cause diseases in humans</li> <li>• Formulate scientific questions about practical problems and issues related to micro-organisms</li> <li>• Display in an appropriate format and report on information/evidence gathered concerning the benefits and/or costs to society of micro-organisms</li> <li>• Gather, integrate and interpret information from print and electronic sources on a related health topic and report the findings</li> </ul> <p><b>SNC 4M Science</b></p> <ul style="list-style-type: none"> <li>• Analyse the costs and benefits of using organic products and assess their global impact on the environment</li> <li>• Identify and describe strategies for pest control other than the use of organic products</li> <li>• Describe the modes of transmission of diseases including those that are insect-borne</li> </ul>	<ul style="list-style-type: none"> <li>• Describe some of the means used by agencies and governments to control the spread of disease, both locally and globally</li> <li>• Assess the possible positive and negative effects of a scientific discovery on society and the environment</li> </ul> <th>BUSINESS STUDIES</th> <td> <p><b>BBB 4M International Business Fundamentals</b></p> <ul style="list-style-type: none"> <li>• Evaluate the advantage and disadvantages in both developed countries and developing countries with regard to business opportunities</li> <li>• Analyse the ways in which international development agencies and non-governmental organizations promote economic progress in developing countries</li> </ul> </td>	BUSINESS STUDIES	<p><b>BBB 4M International Business Fundamentals</b></p> <ul style="list-style-type: none"> <li>• Evaluate the advantage and disadvantages in both developed countries and developing countries with regard to business opportunities</li> <li>• Analyse the ways in which international development agencies and non-governmental organizations promote economic progress in developing countries</li> </ul>
	<th>CANADIAN AND WORLD STUDIES</th> <td> <p><b>CGC 1P Geography of Canada</b></p> <ul style="list-style-type: none"> <li>• Evaluate Canada's effectiveness and commitment in responding to global challenges</li> </ul> <p><b>CGG 3O Travel and Tourism</b></p> <ul style="list-style-type: none"> <li>• Identify the economic, cultural, political and environmental components of selected issues related to travel and tourism</li> <li>• Explain how various factors contribute to the growth or decline of tourism around the world</li> </ul> <p><b>CGW 4U Canadian and World Issues</b></p> <ul style="list-style-type: none"> <li>• Analyse problems of hunger and poverty in selected countries and explain how certain practices may aggravate the problem</li> <li>• Explain the relevance of governmental and non-governmental organizations to work on poverty, disease and the environment</li> </ul> </td>	CANADIAN AND WORLD STUDIES	<p><b>CGC 1P Geography of Canada</b></p> <ul style="list-style-type: none"> <li>• Evaluate Canada's effectiveness and commitment in responding to global challenges</li> </ul> <p><b>CGG 3O Travel and Tourism</b></p> <ul style="list-style-type: none"> <li>• Identify the economic, cultural, political and environmental components of selected issues related to travel and tourism</li> <li>• Explain how various factors contribute to the growth or decline of tourism around the world</li> </ul> <p><b>CGW 4U Canadian and World Issues</b></p> <ul style="list-style-type: none"> <li>• Analyse problems of hunger and poverty in selected countries and explain how certain practices may aggravate the problem</li> <li>• Explain the relevance of governmental and non-governmental organizations to work on poverty, disease and the environment</li> </ul>

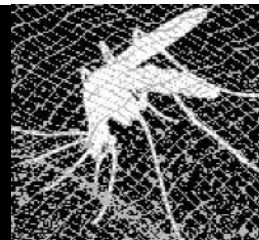
**UNIT****OVERVIEW**

The mini-unit begins with an introductory online video clip from the global Roll Back Malaria (RBM) campaign, <http://www.rollbackmalaria.org/multimedia/video.html>, that introduces students to the disease as a whole and to some of the socio-economic issues associated with the disease. Following the viewing of this video, students are encouraged to formulate questions about the disease that may help to drive further discussions throughout the unit.

The unit continues with activities on the life cycle of the *Plasmodium* parasite; mapping exercises that plot overall global malaria transmission trends; group discussion activities that examine various case studies related to the impacts of malaria, and closes with a culminating activity where students are challenged to respond to their learning by formulating an awareness and action campaign for their school.

# MALARIA LESSONS 1 & 2

## THE LIFE CYCLE AND TRANSMISSION OF MALARIA



### Established Learning Goals

- Develop a basic understanding of malaria as a human disease
- Demonstrate an understanding of the life cycle of *Plasmodium*, the malaria-causing parasite
- Demonstrate an understanding of the scope of the malaria epidemic and be able to identify major areas of risk around the globe

### Assessment Evidence

- Students will be able to describe the general life cycle of the *Plasmodium* parasite.
- Students will be able to describe the general trend in malaria infection around the world through mapping relevant statistical and diagrammatic data.

### Teacher Background Information

Malaria is a disease that affects millions of people, of all ages, around the world. While it is preventable and curable, a child dies of malaria every 30 seconds, and more than one million people die of the disease every year. Most of these deaths are in Africa and most of them are infants and children under the age of five. Pregnant women are also at high risk. Over 40 per cent of the world's population live in the regions where malaria is most prevalent, around the equatorial zone, although climate change may be promoting the spread of malaria to adjacent regions.

### Quick Facts:

- Malaria affects approximately 500 million people every year.
- Malaria kills more than 1 million people every year.
- Malaria deaths account for 20 per cent of all deaths among children under the age of five in sub-Saharan Africa.
- Most cases of malaria are in sub-Saharan Africa.
- Many African families spend up to a quarter of their annual income on malaria treatment and lose several weeks or months of income per year due to related illness.
- In many parts of Africa and most of Asia, the malaria parasite has become increasingly resistant to traditional treatments like chloroquine and sulphadoxine-pyrimethamine. Artemisinin-containing combination therapy (ACT) is a more effective therapy but costs 10 to 20 times more than the traditional methods at US\$ 2 to 3 per adult dosage.
- Using insecticide-treated bed nets is an effective and affordable method of malaria prevention, reducing transmission of malaria by 50 and reducing mortality from all causes by 20 per cent, but at the end of 2004, fewer than 5 per cent of African children were sleeping under bed nets.
- Pregnant women (especially those with no immunity) are at a high risk for malaria infection.
- Malaria is caused by a parasite (of the Kingdom Protista) of the genus *Plasmodium* that is spread from person to person through the bite of an infected female mosquito (of the genus *Anopheles*). First symptoms, including fever, headache, chills and vomiting, typically appear 10 to 15 days after infection. If left untreated, malaria can cause severe illness and is often fatal. Transmission differs in intensity depending on factors such as local rainfall patterns, location of mosquito breeding sites and presence of various mosquito species. Some areas are malaria zones throughout the year, while others have malaria "seasons" that usually coincide with the local rainy season.
- There are four species of *Plasmodium* that result in human malaria – *Plasmodium falciparum* (*P. falciparum*), *P. vivax*, *P. malariae*, and *P. ovale*.
- *P. falciparum* is the most deadly form of malaria.
- A full World Health Organization (WHO) fact sheet on malaria can be found in Appendix 1 of this resource. See [www.who.org](http://www.who.org), [www.malarianomore.org/kids/educational-materials.php](http://www.malarianomore.org/kids/educational-materials.php) or <http://rbm.who.int> for more information. A detailed set of answers to "Frequently Asked Questions" can be found at the bottom of [www.rollbackmalaria.org](http://www.rollbackmalaria.org).

## Planning Notes

- Preview and prepare introductory video for download and viewing, from <http://www.rollbackmalaria.org/multimedia/video.html>, in *Publications and Multimedia, Video: Kill or Cure: The World's Deadliest Diseases — Malaria, Part 1*, a BBC production. (Real Audio Player or Flash is required.)
- Students will need Internet access for Activity 3 (a non web-based version is also provided but students will need access to atlases for this option).
- Prepare overheads of:
  - Black Line Master (BLM) 1 — *Kill or Cure: The World's Deadliest Diseases — Malaria, Part 1*
  - BLM 2 — The Basic Life Cycle of a Malaria Infection
  - BLM 3 — Detailed Life Cycle of *Plasmodium*
- Prepare student copies (1/student) of:
  - BLM 1 — *Kill or Cure: The World's Deadliest Diseases — Malaria, Part 1*
  - BLM 2 — The Basic Life Cycle of a Malaria Infection
  - BLM 3 — Detailed Life Cycle of *Plasmodium*
  - BLM 4 — The Spread of Malaria

## Lesson Overview

### • Teaching/Learning Strategies:

- Activity 1: Introduction to Malaria  
Preconceptions and on-line video from the Roll Back Malaria project
- Activity 2: Disease Life Cycle and Transmission
- Activity 3: The Spread of Malaria  
Using a Web site (and/or data tables) to identify key areas of infection globally



# LESSON 1 — TEACHING/LEARNING STRATEGIES

## Activity 1. Introduction to Malaria

(with short video shown online from Roll Back Malaria Web site).

- Distribute **BLM 1 — *Kill or Cure: The World's Deadliest Diseases — Malaria, Part 1.***
- Ask students to complete the preconception activity about malaria before viewing the video. You may opt to have students share and discuss these preconceptions as a class or in small groups before the video begins.
- Use the remainder of BLM 1 as guiding questions during viewing of the online video: *Kill or Cure: The World's Deadliest Diseases — Malaria, Part 1* from <http://www.rollbackmalaria.org/>, under *Publications and Multimedia, Video, Kill or Cure: The World's Deadliest Diseases — Malaria, Part 1, a BBC production.* (Real Audio Player or Flash is required.)
- Discuss those issues from the video identified by students.
- Ask students to complete the last column of the preconception chart and encourage students to share their learning from the video.
- Distribute blank copies of **BLM 2 — The Basic Life Cycle of a Malaria Infection** (or reproduce as an overhead for referral during the lesson) and lead students through a basic discussion about malaria infection and major factors driving infection.
- Ask students the following questions upon completion of this basic life cycle on BLM 2:

**Knowing what you do now, suggest some simple preventative measures that could be used to reduce the risk of malaria infection.**

*Examples: sleeping in an area where there are not many mosquitoes, getting rid of standing water where mosquitoes breed, sleeping under a bed net, using insect repellent, some students may also know that there are preventative drugs that can be taken before going to a malaria zone, etc.*

**Why do you think is it difficult for many people in the hardest hit areas of the world to access these simple methods of prevention?**

*Examples: limited access to health care in general, limited resources to purchase and/or maintain bed nets, medication too costly, poor health system infrastructure due to conflict/emergencies, proximity to health centre or clinic, etc.*

## Activity 2. Disease Life Cycle and Transmission

- Distribute copies of **BLM 3 Student – Detailed Life Cycle of *Plasmodium***.
- Use **BLM 3 Teacher** as an overhead or for discussion to work through a more detailed life cycle for *Plasmodium*.

## Activity 3. The Spread of Malaria

*Note: This activity could also be assigned for homework or as an independent assignment outside of class time.*

- Distribute copies of **BLM 4 — The Spread of Malaria** and ask students to complete the exercise independently or in pairs. This activity has been developed so that it can be completed with or without online access to malaria data. Please distribute the appropriate version of BLM 4 to suit your technology needs. The offline version of the activity will be a good challenge in terms of country identification and geography skills!



## KILL OR CURE: THE WORLD'S DEADLIEST DISEASES — MALARIA, PART 1

(BBC Production)

### Preconception Activity

Complete the first two columns of the chart before viewing the online video *Kill or Cure: The World's Deadliest Diseases — Malaria, Part 1*.

#### TOPIC: MALARIA

What I Know	What I Want to Know	What I Learned

### Observing the Video

1. Record brief notes about any **biological** information presented in the video (e.g. what causes malaria infection and how it spreads).
2. Record brief notes about any **sociological** information (e.g. how the disease is affecting people and communities beyond the medical implications) presented in the video.
3. Identify **at least three** themes or challenges related to malaria presented in the video.
4. At the end of the video, complete column 3 of the chart.



## KILL OR CURE: THE WORLD'S DEADLIEST DISEASES — MALARIA, PART 1

(BBC Production)

### Preconception Activity

Complete the first two columns of the chart before viewing the online video *Kill or Cure: The World's Deadliest Diseases — Malaria, Part 1*.

#### TOPIC: MALARIA

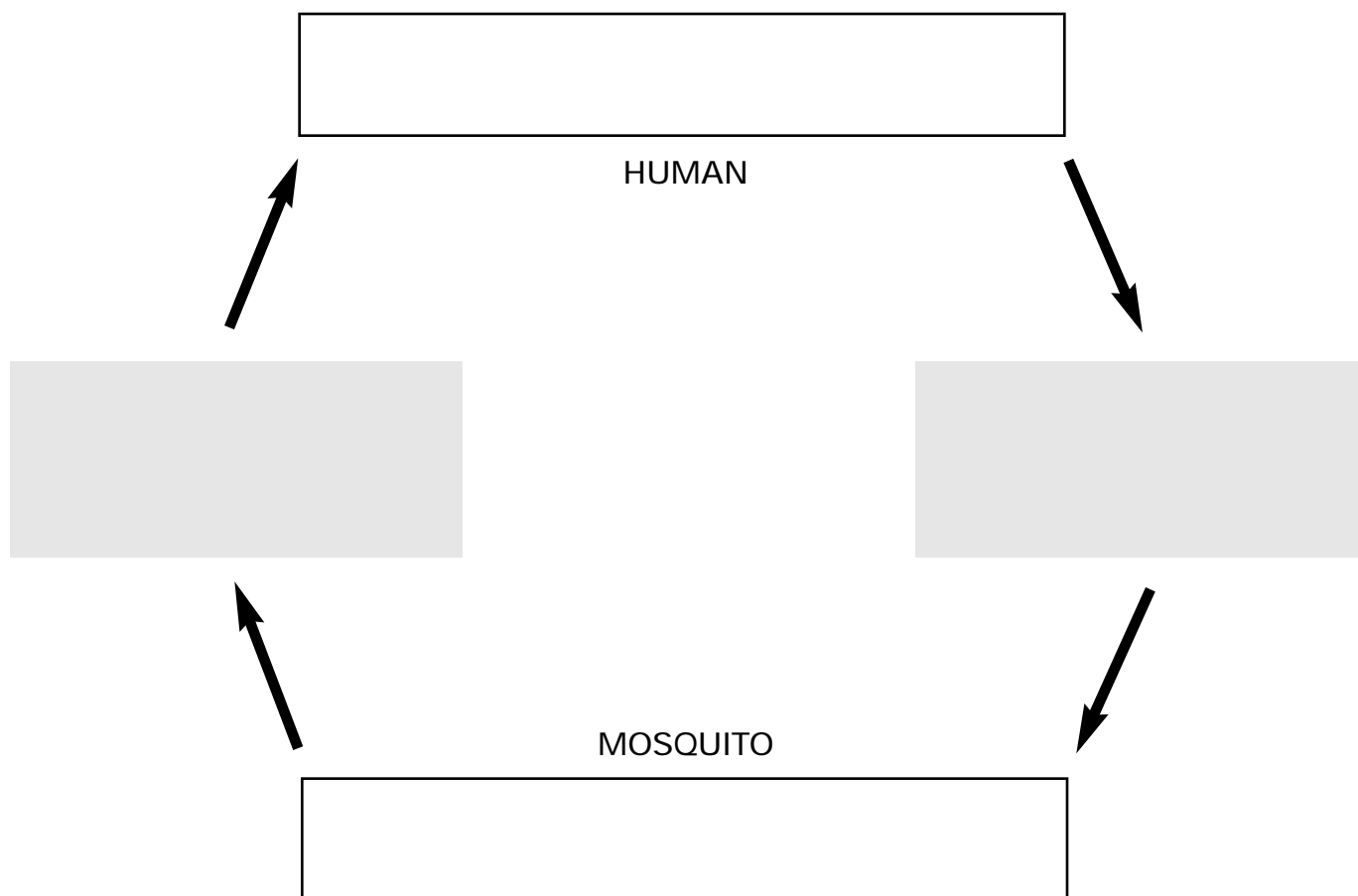
What I Know	What I Want to Know	What I Learned
<i>Will vary</i>	<i>Will vary</i>	<i>Will vary – may include:</i> <ul style="list-style-type: none"> <li><i>• A child in Africa dies from malaria every 30 seconds</i></li> <li><i>• Biggest killer of children — 90 per cent of deaths are children</i></li> <li><i>• Bed nets are a good prevention method</i></li> </ul>

### Observing the Video

- Record brief notes about any **biological** information presented in the video (e.g. what causes malaria infection and how it spreads).
  - Malaria is largest killer of children in the world — infection is worse in small weak bodies*
  - Malaria caused by a parasite that is passed to people through mosquito bites — parasite attacks liver and then red blood cells where it can travel to kidney and spleen, sometimes the brain*
  - Can be deadly in 24 hours without treatment; causes one million deaths/year*
  - Has been eradicated in more developed countries*
  - Many children can have malaria several times in a matter of months — some receive treatment but still show signs of the disease*
- Record brief notes about any **sociological** information (e.g. how the disease affects people and communities beyond the medical implications) presented in the video.
  - There is a huge need for affordable drugs that are safe*
  - The developing world has to rely on older drugs that are not always effective against the parasite (parasite has evolved to develop resistance to these drugs); one million deaths/year*
- Identify **at least three** themes or challenges related to malaria presented in the video.
  - There is a need for new and effective drugs that are affordable for all — and investment in continuing research on prevention and treatment*
  - Malaria is rampant in sub-Saharan Africa*
  - Drug resistance is a problem*
  - Access to health care is not universal — unfair as the disease is treatable and preventable and yet millions are dying without access to preventative (i.e. bed nets) or treatment measures*
- At the end of the video, complete column 3 of the preconception chart.



## THE BASIC LIFE CYCLE OF A MALARIA INFECTION

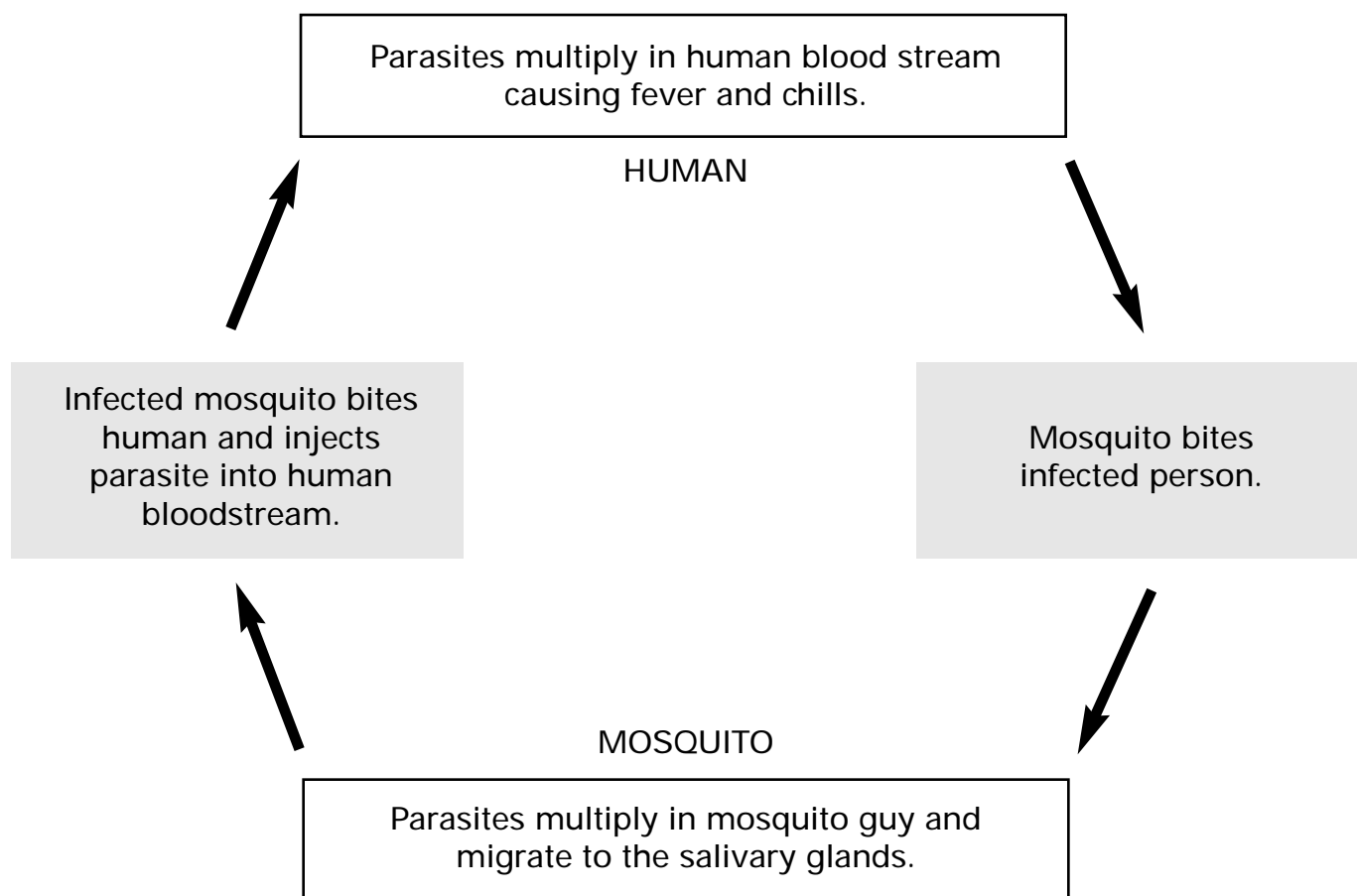


Adapted from: [http://rbm.who.int/cmc\\_upload/0/000/015/372/RBMInfosheet\\_1.htm](http://rbm.who.int/cmc_upload/0/000/015/372/RBMInfosheet_1.htm)

**Key Factors in Malaria Infection:**



## THE BASIC LIFE CYCLE OF A MALARIA INFECTION



Adapted from: [http://rbm.who.int/cmc\\_upload/0/000/015/372/RBMInfosheet\\_1.htm](http://rbm.who.int/cmc_upload/0/000/015/372/RBMInfosheet_1.htm)

### Key Factors in Malaria Infection:

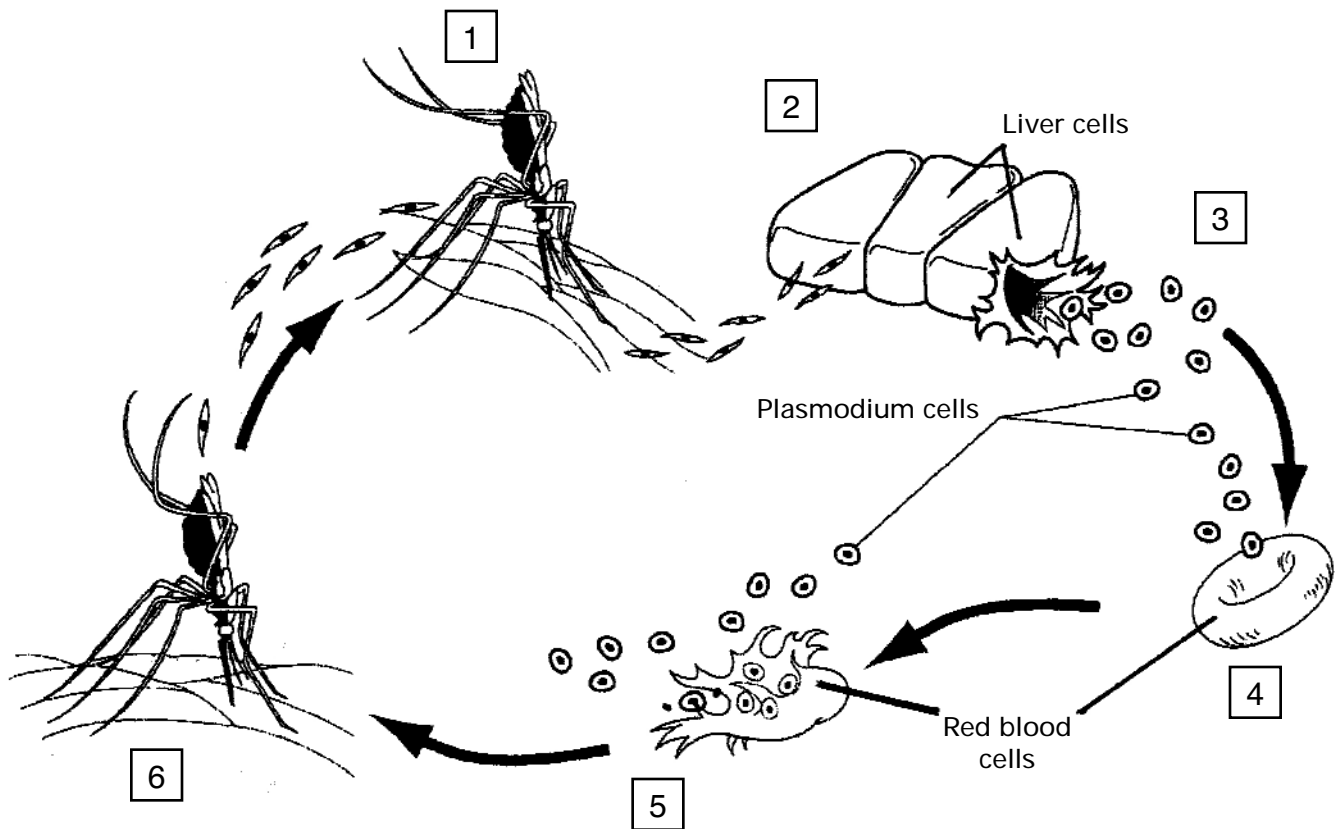
- Mosquitoes tend to be active and feeding during the hours when people are asleep.
- Both humans and mosquitoes are used as hosts for the malaria parasite.
- Malaria goes from infection to onset of symptoms very rapidly; a matter of 9 days to a month, depending on the species of *Plasmodium*.
- Transmission differs in intensity depending on factors such as local rainfall patterns, location of mosquito breeding sites, and presence of various mosquito species. Some areas are malaria zones throughout the year, while others have malaria “seasons” that usually coincide with the local rainy season.

There are four species of parasite that lead to malaria in humans, all of the genus *Plasmodium*. Most malaria infections are caused by *Plasmodium falciparum*, the most severe and life-threatening form of the disease. Key malarial regions are also home to the most efficient, and therefore deadly, species of the mosquitoes of the genus *Anopheles*, the females of which transmit the disease.



## DETAILED LIFE CYCLE OF *PLASMODIUM*

(Diagram *Life Cycle of Plasmodium* used with permission from Addison-Wesley Biology 11,  
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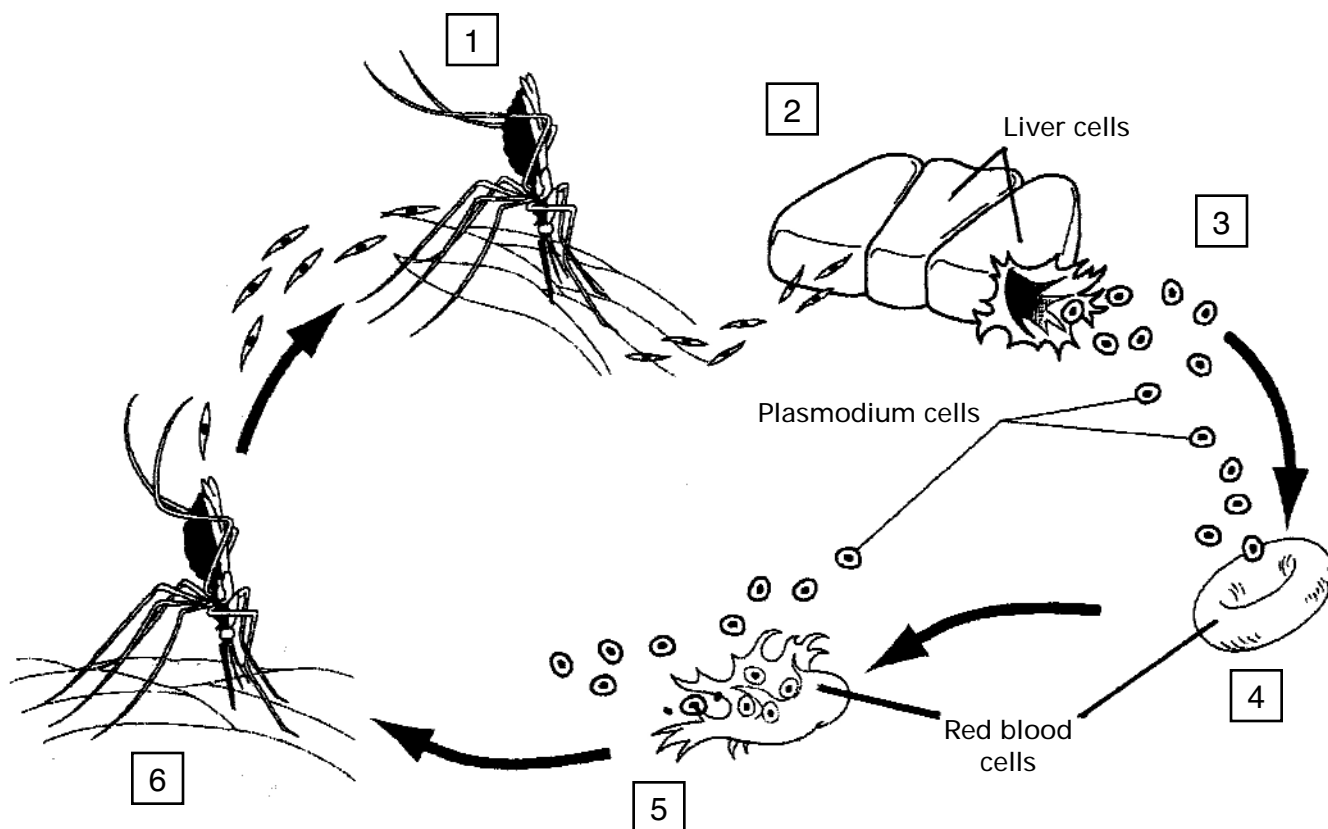


1	
2	
3	
4	
5	
6	



## DETAILED LIFE CYCLE OF *PLASMODIUM*

(Diagram *Life Cycle of Plasmodium* used with permission from Addison-Wesley Biology 11,  
Copyright © 2002 Pearson Education Canada Inc.)



\*Because this is a cycle, we will intentionally focus on the mosquito stage.

1	A female <i>Anopheles</i> mosquito carries the sporozoites of the parasite <i>Plasmodium</i> (of the kingdom Protista) in her saliva. With a blood meal from a human, as with any mosquito bite, she injects a portion of her saliva into the skin. Normally when you get a mosquito bite, it is the saliva of the mosquito that makes the bite red and itchy. When <i>Plasmodium</i> parasites are left behind with the saliva, the bite causes a lot more damage than just being itchy.
2	The injected parasites go directly to the liver (the site of red blood cell production). The sporozoites multiply in the liver to become merozoites of the parasite.
3	Merozoites are released to infect red blood cells. (A single sporozoite can produce 30 000 merozoites in 6 days!) Red blood cells contain iron and carry oxygen throughout the body.
4	Merozoites rapidly reproduce over 48 hours within the red blood cells. (As the white blood cells of the immune system recognize the infection, they begin to work hard and cause the body to go into fever.)
5	Red blood cells eventually burst to release more of the parasite into the blood stream. Some of the Merozoites divide to become gametes, or sex cells of the parasite.
6	Another female <i>Anopheles</i> mosquito comes for a blood meal and during feeding, picks up some of the parasite from the human's blood (including both male and female sex cells of the parasite). In the gut of the mosquito, the gametes fuse together (to form sporozoites) and move to the salivary glands where they are re-injected into another human during the next blood meal. The cycle continues with both human and mosquito acting as <b>hosts</b> . The mosquito is the <b>vector</b> for the disease as it is the way that the parasite is transmitted.



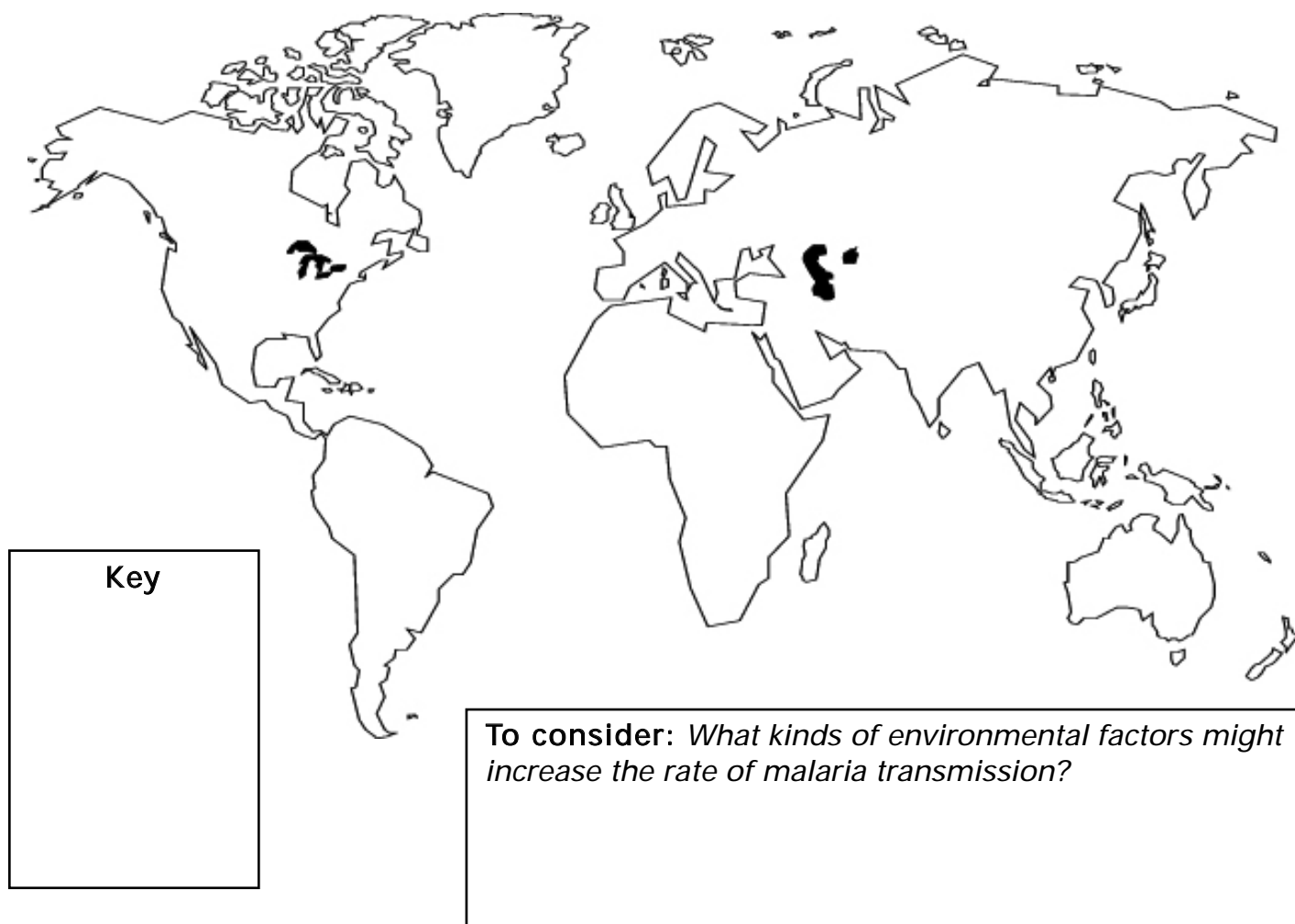


## THE SPREAD OF MALARIA

1. Students will work individually or in pairs to complete the following exercise. Each student must complete their own worksheet.
2. Go to <http://www.rollbackmalaria.org/wmr2005/>
3. At the right side of the page, choose MAPS, MALARIA TRANSMISSION RISK. Use the map presented here to answer the following questions.
  - a. *In general, what parts of the world show the highest risk of malaria infection? Why do you think this might be?*
4. Use the world map provided below, and with an appropriate key/legend, shade the areas of the world according to **risk of malaria transmission**.

Map Title: \_\_\_\_\_

Source: <http://www.abcteach.com/Maps/world.htm>





## THE SPREAD OF MALARIA

- Students will work individually or in pairs to complete the following exercise (use an atlas to help identify country locations). Each student must complete their own worksheet. Use the data table below to answer the following questions. The countries listed here do not represent an exhaustive overview of malaria around the world. They are meant to provide examples only so that global transmission trends can be observed.

**Table 1: Risk of Malaria Transmission**

Country	Malaria Risk	Country	Malaria Risk	Country	Malaria Risk
Canada	none	Sudan—central	high	Namibia—remainder	none
USA	none	Sudan—north central	low	Algeria	none
Argentina	none	Sudan—extreme north	none	Morocco	none
Brazil—extreme north	low	Chad—south	very high	Egypt	none
Brazil—north central	moderate	Chad—north	none	Australia	none
Brazil—central	high	Niger—south	very high	Russia	none
Peru—north-east tip	moderate	Niger—north	none	New Zealand	none
Mexico—southern tip	very high	Nigeria	high	Iran—southern border	moderate
Honduras	very high	South Africa —extreme north-east	high	India—west coast and east coast (including central India)	very high
Nicaragua	very high	South Africa —remainder	none	India—north-east along Nepal border	moderate
Guyana—south	very high	Mozambique	high	India—remainder	low
Guyana—north	high	Botswana—north	moderate	Myanmar	very high
Chile	none	Botswana—remainder	none	China (generally with some moderate pockets in south-east)	none
Uruguay	none	Zimbabwe	moderate	Indonesia (west islands)	low
Democratic Republic of the Congo	very high	Angola—north and east	moderate	Indonesia (east islands)	high
Central African Republic	very high	Angola—remainder	low	Countries of Europe	none
Sudan—south	very high	Namibia—extreme north only	moderate		



2. Extension: During class or as a homework assignment, students can research theories about the impact of global climate change on the spread of malaria and add appropriate shading to their maps to illustrate this.
  - a. Using the world map provided below, and with an appropriate key/legend, shade the areas of the world according to **risk of malaria transmission**.
  - b. *In general, what parts of the world show the highest risk of malaria infection? Why do you think this might be?*

Map Title: \_\_\_\_\_

Source: <http://www.abcteach.com/Maps/world.htm>



Key

**To consider:** *What kinds of environmental factors might increase the rate of malaria transmission?*



## THE SPREAD OF MALARIA

- Students will work individually or in pairs to complete the following exercise. Each student must complete their own worksheet.
- Go to <http://www.rollbackmalaria.org/wmr2005/>
- At the right side of the page, choose MAPS, MALARIA TRANSMISSION RISK. Use the map presented here to answer the following questions.

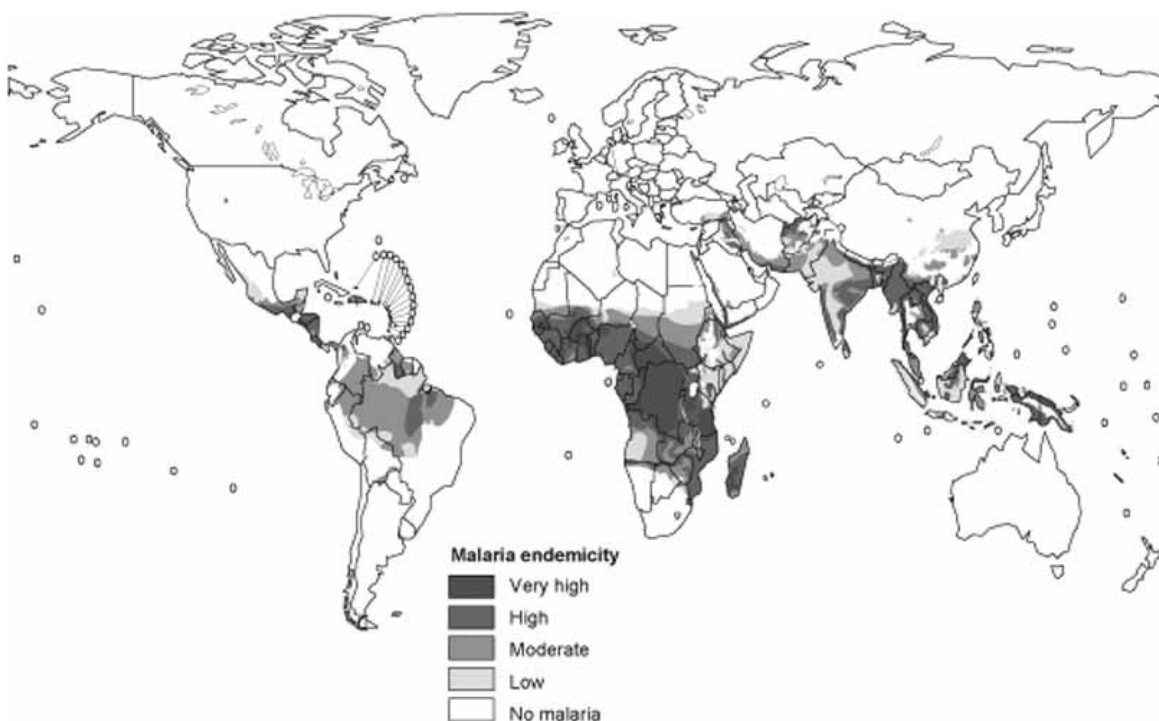
- In general, what parts of the world show the highest risk of malaria infection? Why do you think this might be?***

*Climate is conducive to vector survival, mosquito breeding sites, form of malaria parasite most prevalent, location of world's poorest populations and limited access to preventative measures.*

- Use the world map provided below, and with an appropriate key/legend, shade the areas of the world according to **risk of malaria transmission**.

Map Title: Global Distribution of Malaria Transmission Risk

Source: [rollbackmalaria.org](http://rollbackmalaria.org)

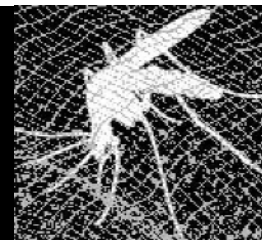


**To consider:** What kinds of environmental factors might increase the rate of malaria transmission?

*Epidemics of *P. falciparum* are devastating if not controlled quickly; factors leading to malaria epidemic: natural (climate therefore more mosquito breeding sites or temperature changes that accommodate vector reproduction, natural disasters) and man-made (conflict, war, agricultural projects, dams, mining, logging) — changing of the physical environment and increase capacity of mosquitoes to transmit malaria; some factors are also due to massive movement of populations so that they are exposed to infection and may not have previous immunity.*

# MALARIA LESSON 3

## IMPACTS OF MALARIA INFECTION



### Established Learning Goals

- Develop a basic understanding of the symptoms of malaria and relate these symptoms to the life cycle of *Plasmodium*
- Demonstrate an understanding of the social and economic impacts of malaria infection around the world

### Assessment Evidence

- Students will be able to relate symptoms of malaria to their previous knowledge of the life cycle of *Plasmodium*.
- Students will be able describe the socio-economic impacts of malaria.

### Teacher Background Information

The Roll Back Malaria partnership estimates that malaria costs Africa alone approximately US\$ 12 billion each year in lost Gross Domestic Product (GDP) but that controlling the disease would cost much less. The disease has serious economic impacts and slows economic growth and development in those areas hit the hardest. It further widens the gap between rich and poor as the disease is one that primarily affects the poor, who tend to live in malaria-prone areas in poorly-made dwellings that offer few barriers to infection and have the least access to prevention and treatment measures.

Malaria also has a massive impact on Africa's economy at the family level. The indirect costs of lost productivity and income associated with the disease can ravage a family's finances. Further, local investment can be negatively affected in malarial areas as tourist opportunities remain underdeveloped and traders become unwilling to travel to sell their wares in local markets. Local farmers, in an effort to avoid labour problems associated with malaria infection during harvest season, may move to favour subsistence crops rather than labour-intensive cash crops. Cumulatively, the impact translates to national economies through the loss of human resources and income generation. Malaria is responsible for much of the continent's absenteeism, death, illness, lost education time as children are ill or caring for ailing parents, and reduced social development in children because of illness.

At the same time, malaria places a huge burden on a country's health care system and represents about 10 per cent of Africa's overall disease burden, 40 per cent of public health expenses, 30-50 per cent of inpatient hospital admissions and 50 per cent of outpatient visits in regions of high transmission. Indirectly, there are also costs associated with transporting patients to and from clinics, maintaining the public health infrastructure as a whole and providing support for patients and families during hospital stays. There are also burdens associated with providing bed nets for prevention, managing mosquito control programmes

and providing education campaigns throughout a region. These may also be considered “opportunity costs”; diverting health investments from other diseases including HIV/AIDS.

## Planning Notes

- Prepare and cut BLM 5 – Review of Malaria Life Cycle
- Prepare class set of BLM 6 – Summary of Case Study Findings

## Prior Knowledge Required

- Students should have a basic knowledge of malaria as a disease and understand the life cycle of the *Plasmodium* parasite.

### Lesson Overview

- Key words
- Teaching/Learning Strategies
  - Activity 1: Consolidation of Previous Learning – Review of life cycle and terms from last lesson
  - Activity 2: Symptoms of Malaria
  - Activity 3: Social Impacts of Malaria – Case Study Analysis

## TEACHING/LEARNING STRATEGIES

### 1. Consolidation of Previous Learning

- Recall as a class the definition of a **parasite**.

*A **parasite** is an organism that cannot survive without a host, another living organism from which it gets nutrients, shelter and aid in its reproduction. An example of a common parasite is head lice.*

- What microscopic parasite is responsible for malaria? *Plasmodium sp.*
- The malaria parasite relies on two **hosts**. What are they?

*Mosquito and human; other animals can also host Plasmodium. The Plasmodium organisms are dependent on the hosts to reproduce. They cannot reproduce without the right environment, either in the liver of humans or in the belly of the mosquito.*

- *Plasmodium* also needs a means of transmission, a way to get to a new host. What term is used to describe this mode of transmission?

***Vector**; recall that the Anopheles mosquito is the vector for Plasmodium. Without the vector to spread the parasite (and the infection), the parasite will die off when the host dies.*

- Make a copy of **BLM 5— Review of Malaria Life Cycle**. Cut the statements into individual pieces of paper and randomly distribute to students. (You may also opt to copy this enough times so that everyone has a statement and the class will form several “circles” to put the statements in order.)
  - Ask students to read their individual statements and then circulate with other students to put the statements in order according to the malaria life cycle that was discussed previously.
  - Have students form a circle according to the order of their statements (emphasize that this is a life CYCLE and the process repeats itself).
  - When complete, begin with the statement: “*A malaria-infected female Anopheles mosquito takes a blood meal from a human*” and have students read their statements aloud to the rest of the class, in order, based on the successive life cycle stages. Encourage the class to make any necessary changes to the order.
- Correct solution:
  - *A malaria infected female Anopheles mosquito takes a blood meal from a human.*
  - *Plasmodium parasites in the form of sporozoites are injected into the human blood stream and travel to the liver (the site of blood cell production).*
  - *Sporozoites rapidly divide in the liver cells to form 30,000 to 40,000 merozoites.*
  - *Merozoites leave the liver and invade red blood cells.*
  - *Merozoites rapidly divide inside the red blood cells.*
  - *Red blood cells burst and merozoites are released into the blood stream to invade other red blood cells.*
  - *Some merozoites divide to form gametes (male and female sex cells for Plasmodium parasite)*
  - *A female Anopheles mosquito bites a malaria-infected human and ingests both male and female immature gametes (or sex cells) of the malaria parasite.*
  - *Sex cells fuse in the mosquito gut and eventually develop into new malaria parasites (in the form of sporozoites).*
  - *Sporozoites migrate to the mosquito salivary glands.*

*Cycle continues.....*

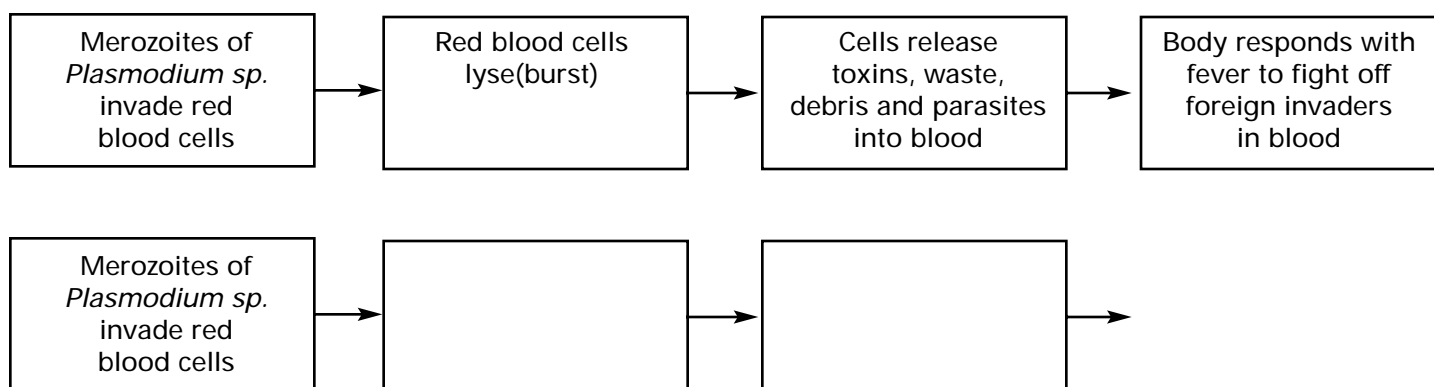
**Variation:** Form groups of four within the class, and distribute one package of statements to each group. Ask them to put the statements in order according to their learning from last class; OR use this activity as an assessment tool to gauge individual student understanding of the *Plasmodium* life cycle.

## SYMPTOMS OF MALARIA

As a class, recall characteristics and functions of red blood cells (RBC).

- *Contain iron*
- *Bind oxygen*
- *Carry oxygen through body in blood*

Draw a blank flow chart model on the board or overhead to describe the symptoms of malaria related to the life cycle of the parasite. Student may also add the symptoms to their copies of **BLM 3 — Detailed Life Cycle of *Plasmodium***.



Extra notes about symptoms:

- Fevers are intermittent and correspond with merozoites attacking and destroying red blood cells.
- A typical malaria “episode” usually starts with sudden, violent chills followed by an extreme fever (as white blood cells attack infection) and sweating (to bring body temperature back to normal).
- Repeated infection can lead to anemia (decrease in concentration of red blood cells in the blood) and exhaustion.
- If a person is exposed repeatedly to malaria, they may develop immunity, in much the same way an individual can develop immunity to certain cold viruses with previous exposure. However, if a person has never been exposed to the malaria parasite, the impact of the infection is much worse; this is especially true for young children. Travellers from non-malaria zones are therefore also highly vulnerable. Large and devastating epidemics can occur in areas where people have had little contact with the malaria parasite, and therefore have little or no immunity. These epidemics can be triggered by weather conditions and further aggravated by complex emergencies or natural disasters. It is important for people in such areas to have quick access to malaria-fighting medicines in order to fight the symptoms, which can ultimately result in death.

**NOTE:** The pattern of fever and other symptoms varies with the species of *Plasmodium* responsible for the infection. A summary of the four malaria infections affecting humans can be seen below:



Species	Intermittent Fever	Other Comments
<i>Plasmodium falciparum</i>	every 48 hours	<ul style="list-style-type: none"> <li>• very common</li> <li>• very severe; most deadly</li> <li>• can also cause severe headaches, convulsions and delirium</li> <li>• can also develop into cerebral malaria (where infected red blood cells attach to small blood vessels in the brain, cause inflammation and block the flow of oxygen and nutrients to the brain)</li> </ul>
<i>Plasmodium vivax</i>	every 48 hours	<ul style="list-style-type: none"> <li>• very common</li> <li>• merozoites in the liver can remain dormant (symptomless) for months (or up to 2 years!) and can trigger periodic relapses of malaria</li> </ul>
<i>Plasmodium ovale</i>	every 48 hours	<ul style="list-style-type: none"> <li>• merozoites in the liver can remain dormant (symptomless) for months (or up to 4 years!) and can trigger periodic relapses of malaria</li> </ul>
<i>Plasmodium malariae</i>	every 72 hours	

## IMPACTS OF MALARIA

Several case studies have been developed to provide students insight into the multi-faceted impact that malaria is having around the world. You may opt to:

- Divide students into groups to complete individual case studies and share their key findings with other students. A worksheet (BLM 6) has been attached here to organize the findings of each group.
- Assign all case studies as independent work for students to complete individually.



### CASE STUDY 1

Busie is a paediatrician in southern Africa. As a doctor working with children, she is overwhelmed by the number of children who are brought to her clinic with high fevers, chills, sweats, head and body aches and nausea. She suspects that most of them have malaria. She also knows that many children do not get a chance to see a doctor and that many die before they can access proper medical care. At a conference last month in Rwanda, new statistics were revealed by UNICEF that confirmed Busie's observations: malaria infects nearly 500 million people every year, is the leading cause of death (representing about 20 per cent of all deaths – or 3,000 deaths/day) among children under the age of five in Africa. Further, her colleagues reported that malaria kills more than one million people globally every year and that 90 per cent of these deaths occur in Africa.

1. What is the main theme presented in this case study?
2. Is anything from this case study shocking to you?
3. Why do you think the transmission rates for malaria are so high in Africa? *(This question is a bit of a challenge – think of everything you have learned so far about malaria – biological, social, economic.)*
4. With numbers like those presented at the conference, what kinds of impact do you think malaria is having in Africa? (Think about social, biological, economic, health impacts etc.)

### CASE STUDY 2

Jabulile and Sankara have been married for seven years and live close to Cape Town in South Africa, an area not typically affected by malaria. Jabulile is pregnant with their first child, and to spend some time together before their child is born, the couple is planning a vacation to Mozambique in March. While Jabulile is making their last minute travel plans, she reads a newspaper report about Mozambique. The article, based on a UN report, indicates that while Mozambique's climate favours year-round transmission of malaria, peak transmission rates occur during the country's rainy season between December to April. The most common form of the infection in Mozambique is *Plasmodium falciparum* and accounts for about 90 per cent of all infections. Malaria infection rates are very high and it is the primary cause of death throughout the country – representing about 30 per cent of all recorded deaths. Some estimates suggest that nearly 90 per cent of children under the age of 5 in some areas are infected with malaria parasites. Pregnant women are also at risk, especially in rural areas where many people do not have access to health care and about 50 per cent of the population lives more than 20 km from the nearest health care facility.

1. What factors described here contribute to the high rates of malaria transmission and mortality in Mozambique?
2. Knowing what you do about malaria infection, what makes Jabulile and Sankara especially at risk? What makes Jabulile especially more at-risk?
3. What precautions should the couple take before their trip?

## CASE STUDY 3

Saadya is a health officer from Pakistan working for the World Health Organization and is preparing for an interview about malaria with a well-known television station. As she prepares her notes, she reminds herself of the most recent statistics regarding malaria: it infects 350 to 500 million people each year; it kills one million people, mostly children, and mostly in Africa (90 per cent of malaria deaths occur in Africa with 75 per cent of deaths affecting African children less than five years of age). Before the interview begins, she is confident that she has come prepared with all of the relevant data for her interview. During the interview, it becomes clear to her that the interviewer wants to know more about the socio-economic impacts of malaria around the world than the statistics of infection. The interviewer remarks that malaria is “a disease of the poor and a disease causing poverty.” Saadya answers and shares the following:

“We already know that malaria is taking a tremendous toll on health care systems around the world. In many malaria-endemic countries, health care infrastructure is already weak and malaria now represents about 40 per cent of all public health costs in some countries. In some areas, it accounts for 30 to 50 per cent of all inpatient hospital admissions and 50 per cent of outpatient admission – the burden on the health care system is phenomenal. I am so angry because we know this terrible disease is preventable and treatable and yet the people who need help the most are not getting it!”

“Malaria is also playing a devastating role in driving poverty around the world. It slows economic growth and development and primarily affects the poor, further widening the gap between the haves and the have-nots. Our resource-poor populations tend to live in malaria-prone rural areas where poorly-constructed dwellings offer little protection against mosquitoes. Data suggests that malaria-infected countries experience slower economic growth than non-malaria countries and malaria is estimated to cost Africa alone nearly US\$12 billion in lost GDP. We know that malaria can be controlled for much less than this.”

“At a local level, we see the economic damage in other ways as people stop investing in malaria-prone areas: tourists don’t want to visit for fear of infection, market vendors don’t want to come to those areas to sell their wares in local markets and local farmers are even making changes. A farmer working in cash cropping relies heavily on the labour of other people, but, if during the harvest season many people are sick with malaria, crops go to waste and money is lost. As a result we see many farmers turning back to small-scale subsistence farming and not investing in the local economy.”

“To make matters worse, impoverished communities place heavier demands on the natural environment and can’t afford to protect it. For example, clear-cutting forests is causing the spread of malaria to new areas as well as contributing to global climate change, which in turn spreads the boundaries of malaria zones beyond tropical areas.”

1. What is the major theme of this case study?
2. Were you surprised by anything here?
3. In what ways does malaria contribute to the cycle of poverty in the world?
4. Given the data provided here, what other social and environmental issues are influenced by malaria?
5. Malaria control is now seen as a major way to fight poverty. Explain.

**CASE STUDY 4**

**Epidemics** occur when a sudden and severe outbreak of a given disease is observed within a population and the number of infected individuals spikes higher than what would be typically expected.

Rajesh is a graduate student in India studying malaria epidemics and has a special interest in understanding how emergencies influence malaria outbreaks.

Emergencies can take many forms – some are environmental and others include the outbreak or spread of armed conflict or political instability. Whatever the form, an emergency results in tremendous change and upheaval in a region.

Some emergencies are labeled as “complex emergencies” because there is an absolute or considerable breakdown of social structures and infrastructure. People are displaced and forced to leave their homes, security threats are high, food shortages abound, health care systems are weakened or destroyed, families are separated and humanitarian activities are stopped or hindered by political or military forces.

Up to 30 per cent of malaria deaths occur in countries undergoing complex emergencies; in Africa alone, 120 million people are estimated to be currently living in complex emergency situations. In many cases, death due to malaria exceeds death caused by the conflict itself.

1. Can you think of two types of environmental emergencies? Can you think of two other types of emergencies that are the result of human activity?
2. Why are so many people affected by malaria during times of complex emergency? (Think about all of the ways that people and communities are affected by emergencies and how these might contribute to malaria transmission).

### CASE STUDY 5

These three stories were written by three different children:

- A. We call malaria the “palu” in our village. There used to be a family in our village and every day they threw out their washing water and empty food cans close to their house. One day, three of their children became very sick. The father prepared a local medicinal plant to help the children but their health got much worse - but the family had little money. The next day, the mother heard an announcement on the radio that talked about the same symptoms that her children were showing. The show said, “Malaria is a disease that can kill you and your children. Malaria is the number 1 killer of children under the age of five. If you have malaria, you must go to the hospital and get some help.” She explained to her husband what she had learned on the radio and because the father was so afraid that he would lose his children, they were able to find some money to go to the hospital. At the hospital, they were able to get an injection and some medicines. They were also given an insecticide-treated bed net under which they were told to sleep to prevent further infections.
- B. Malaria is the number one enemy in our villages. I am eight years old and my friend Cyrille had not been in school for a long time. He was a great student so we were all surprised that he was missing so many classes. After school one day, we decided to go to Cyrille's house to see for ourselves why he was missing school. When we got to his house, his mother told us that Cyrille was sick with malaria. We were all really worried and didn't know how this could have happened to our friend. His mother explained that the illness started with a hot body with headaches. He now had some medicine but it was going to take him some time to get better at home before he could come back to school.
- C. There was a family in our village who did not have a lot of money so a local organization had given them a bed net to use at night. The father did not think the children needed to sleep under the net because he was the one who was out working all day for money and should be the one to stay strong. One by one, the children of the family got sick but still, the father did not believe that he was doing anything wrong. The mother got very worried and finally took her children to the clinic where she learned the children had malaria. But it was too late, and the youngest child die — she was only 7 years old. The mother and father were devastated and cried and cried about their lost child.

1. What is the main message shared by these three stories?
2. What simple method of prevention is described here? Why do you think this method of prevention works?
3. Beyond medical impacts, how does malaria affect the lives of children and their families?

## CASE STUDY 6

Although between 300 and 500 million people are infected with malaria every year, and nearly one million people lose their lives to malaria, it is a *preventable* and *treatable* disease.

One way to reduce the spread of malaria is through **vector control** — that is, reducing the levels of malaria transmission by reducing the number and effectiveness of the vectors — the mosquitoes. There are several different methods used to control malaria-carrying mosquitoes. The World Health Organization (WHO) recommends that vector control methods be chosen based on knowledge of the local malaria situation and advocates for an Integrated Vector Management approach — that is, the combined use of several methods. Two of the most important are described here.

One method of controlling mosquitoes is the use of insecticide-treated bed nets (ITNs). Most malaria-carrying mosquitoes bite humans at night, so sleeping under an insecticide-treated bed net (when used properly) provides an inexpensive and effective way of controlling malaria infection. When used properly, ITNs can reduce malaria transmission by 50 per cent and reduce mortality (the number of deaths) by 20 per cent. ITNs not only offer a physical barrier against mosquitoes, but also provide a chemical barrier that lasts for five years. ITNs repel a mosquito from biting, and can reduce overall malaria transmission by killing the mosquito.

UNICEF is the world's largest provider of ITNs and provides families with information about their proper use and care. For the millions of people who are still not able to access ITNs, UNICEF is working hard with partners like Spread the Net to ensure that all children and pregnant women are able to sleep under ITNs. Spread the Net alone hopes to provide 500,000 bed nets to families in Rwanda and Liberia.

WHO also recognizes that, in certain situations and when the proper handling and disposal methods are followed, the indoor spraying of insecticides (chemicals that kill insects) can also be an effective tool for vector control in the fight against malaria (this is also called indoor residual spraying). Indoor spraying seeks to reduce the survival of malaria vectors and therefore reduces the number of mosquitoes entering houses and/or sleeping areas.

1. Compare and contrast the terms: PREVENTABLE and TREATABLE.
2. What two important methods of vector control are described here?
3. How do ITNs contribute to the overall reduction of malaria transmission and mortality?
4. How does indoor spraying contribute to the reduction of malaria transmission and mortality?
5. WHO recognizes that insecticides are effective in reducing overall malaria transmission rates under certain circumstances. What might these circumstances be?
6. There is ongoing debate around the world about the use of the insecticide DDT because of the negative effects it, and its breakdown products, have had on wildlife populations. It is a persistent chemical that exists in the environment many years after its initial use, and while it has been banned in Canada for many years, it spreads across borders and appears in the tissues of Arctic mammals as a result of its use in other parts of the world. However, we know that, when used properly, it is an effective tool in the fight against malaria and has saved millions lives. What do you think about the use of chemicals like DDT for the prevention of malaria?

## TEACHER NOTES FOR CASE STUDIES

### CASE STUDY 1

#### Student Questions

1. What is the main theme presented in this case study?  
*That Africa, and specifically children in Africa, are hardest hit by malaria*
2. Is anything from this case study shocking to you?  
*Answers will vary*
3. Why do you think the transmission rates for malaria are so high in Africa?  
*(This question is a bit of a challenge — think of everything you have learned so far about malaria.) Answers will vary but some suggested areas of discussion include: most malaria disease in Africa is caused by P. falciparum, the most severe/deadly form of disease; Africa is home to the most efficient and deadly species of mosquito that transmits the disease; many countries in Africa lack health infrastructure/resources needed to challenge malaria and many have not introduced vector eradication programmes.*
4. With numbers like those presented at the conference, what kinds of impacts do you think malaria is having in Africa? (Think about social, biological, economic, health impacts etc.)  
*Resulting absenteeism from work affects economy; malaria puts huge demands on the health system; many children are out of school due to illness or caring for sick parents, etc.*

#### Additional Information:

- **From UNICEF:** malaria infects 350 to 500 million people each year; kills one million people every year, mostly children; 90 per cent of malaria deaths occur in Africa
- **From RBM:** estimated to cost Africa US\$12 billion/year in lost GDP (can be controlled for much less)

Malaria is the leading cause of death among children in Africa under the age of 5 (accounts for 20 per cent of deaths) and represents 10 per cent of the continent's disease burden; 40 per cent of public health expenses, 30-50 per cent inpatient admissions, 50 per cent outpatient visits in high malaria transmission areas

Why are malaria rates/deaths so high in Africa? Most disease caused by P. falciparum – most severe/deadly form of disease; also home to most efficient and deadly species of mosquitoes that transmits the disease; many countries in Africa lack health infrastructure/resources needed to address malaria and many have not introduced vector eradication programmes

Malaria has a direct impact on Africa's human resources — absenteeism, death, illness, children's schooling is affected when teachers and students are sick, delayed social development of children because of ongoing illness, etc.

Huge problem with parasite resistance to chloroquine (cheapest and most widely used antimalarial drug) in Africa (especially in the south and eastern parts) – there is a need therefore to change drug approaches in some countries to use more expensive drugs

## CASE STUDY 2

### Student Questions

1. What factors described here contribute to the high rates of malaria transmission and mortality in Mozambique?  
*Environment is conducive to vector survival, especially in rainy season (good habitat for mosquitoes to grow); most infection due to P. falciparum, the most deadly form of the disease; many people do not have quick and local access to health care centres*
2. Knowing what you do about malaria infection, what makes Jabulile and Sankara especially at risk?  
*They are from an area of Africa that is not typically a malaria area so they will not have any immunity — disease may be worse for them if they do contract the infection. What makes Jabulile alone more at risk? She is pregnant, which puts her at even higher risk for malaria-related complications.*
3. What precautions should the couple take before their trip?  
*Purchase an insecticide-treated bed net; take preventative medicines (as shown in beginning video); travel outside of the rainy season if possible.*

### Additional Information:

In most endemic areas, pregnant women represent the main adult risk group for malaria.

Symptoms and complications associated with malaria during pregnancy differ with intensity of malaria transmission and with the level of immunity acquired by pregnant women. In low epidemic areas, women may not have acquired a significant level of immunity and usually become ill with *P. falciparum* (the most deadly form of the infection). Pregnant women are two to three more times more likely to develop severe disease than non-pregnant adults in the same area. Maternal death can result from infection or from malaria-related anaemia. Infection can also result in spontaneous abortion, neonatal death and low birth weight (a leading risk factor for infant mortality and sub-optimal growth and development).

In areas of high malaria transmission, most adult women have enough immunity so that even in pregnancy *P. falciparum* does not usually result in fever or other symptoms. The principal effect in these areas is malaria-related anaemia in mothers with the presence of parasites in the placenta. This can result in fetal nutrition impairment and can lead to low birth weight.

## CASE STUDY 3

### Student Questions

1. What is the major theme of this case study?  
*Malaria has severe socio-economic impacts on populations and is a contributing factor to poverty in endemic areas.*
2. Were you surprised by anything here?  
*Answers will vary*



3. In what ways is malaria contributing to the cycle of poverty in the world?  
*Slowing economic growth due to absenteeism and lost productivity; health systems must accommodate the huge demand due to malaria, families spend large portions of their income on malaria control and treatment (if they can); economic development in malaria-prone areas is slowed because of fear of infection among tourists, market vendors etc.*
4. Given the data provided here, what other social problems do you think are influenced by malaria?  
*Education affected as children are out of school due to illness or having to take care of parents or younger siblings while parents ill; parents and communities lack energy to provide highest level of care and protection for children*
5. Malaria control is now seen as a major way to fight poverty. Explain.  
*Keeping people healthy will keep people working, keep children in school and help to promote local investment in areas typically affected by malaria*

### Additional Information:

Malaria is a disease that primarily affects the poor, as they tend to live in malaria-prone rural areas in poorly-made dwellings that offer few barriers against infection. Malaria is a major constraint on economic development and further widens the economic gap between countries with malaria and those without. In Africa alone, malaria is estimated to cost US\$12 billion/year in lost GDP (but can be controlled for a fraction of that sum).

Malaria-endemic countries have a lower annual economic growth than non-malaria countries (economists say that malaria imposes a “growth penalty” of up to 1.3 per cent/year in some African countries). If compounded over years, this results in a big difference in GDP between countries and can affect the economic growth of an entire region.

Malaria results in lost productivity and income associated with illness and death (including unpaid work in the home such as child care), contributes to human pain and suffering, affects children's schooling and social development (through absenteeism, permanent neurological damage associated with severe episodes of infection), and the risk of infection can deter local investment. Tourism industries remain underdeveloped for fear of infection, markets remain unpopulated because traders are unwilling to travel to malaria-affected areas and farmers show preference for subsistence farming over labour-intensive cash cropping (for fear of losing workers during the labour-heavy harvest season).

Families incur personal expenses related to bed net purchases and maintenance, doctor fees, anti-malarial drugs, transport to clinics and support for family members during hospital stays. The public sector must maintain health infrastructure, publicly manage mosquito control programmes if they exist and provide malaria education. In some countries, malaria accounts for up to 40 per cent of public health expenditures, 30 to 50 per cent of inpatient admissions, and 50 per cent of outpatient admissions.

Malaria control is now seen as an important element of poverty reduction as prioritized by the Millennium Development Goals (MDGs) and prevention is becoming more affordable with reduced/abolished taxes on insecticides, bed nets, etc. The private sector is seeing that supporting malaria control boosts labour, improves community/government relations and reduces absenteeism. Investment to control malaria increases the human productivity that will

eventually encourage market expansion, boost household spending and increase consumption patterns.

## CASE STUDY 4

### Student Questions

1. Can you think of two types of environmental emergencies?  
*Hurricane Katrina, tsunami, earthquake in Pakistan etc.*  
Can you think of two other emergencies that are a result of human activity?  
*The ongoing conflict in Darfur; Sudan; war in Afghanistan*
2. Why are so many people affected by malaria during times of complex emergency? (Think about all of the many ways that people and communities are affected by emergencies and how these might contribute to malaria transmission).  
*The emergency causes chaos and destroys social services infrastructure (i.e. health care and education); cuts food supplies and exposes people to multiple risks of infection; displaced persons often live in refugee camps in poor conditions (may not have access to bed nets or protected housing to prevent mosquito entry) that favour water-borne vector reproduction and disease transmission.*

### Additional Information:

Up to 30 per cent of malaria deaths are in countries undergoing complex emergencies (characterized by war, civil strife, food shortages and civilian displacement). In Africa alone, 120 million people live in complex emergency situations. Deaths due to malaria during these times often exceed those caused by the conflict itself. The chaos of the emergency destroys health care systems, cuts food supplies and exposes people to multiple infections. Poor living conditions in refugee and/or internally displaced persons' camps and war-affected towns can promote the conditions necessary for mosquito reproduction, like standing water, and increase the rate of infection.

## CASE STUDY 5

### Student Questions

1. What is the main message shared by these three stories?  
*That children are most at risk of malaria infection*
2. What simple method of prevention is described here? Why do you think this method of prevention works?  
*Sleeping under an insecticide-treated bed net – the bed net provides both a physical and chemical barrier to the mosquitoes carrying the malaria parasite. Because these mosquitoes usually bite at night, bed nets provide good protection while people sleep.*
3. Beyond medical impacts, how does malaria affect the lives of children and their families?  
*Pulls children out of school because of illness or because they have to care for sick parents; families have to find funds for prevention/treatment options; parents may not be able to work if they are sick, therefore reducing overall family income*

### Additional Information:

- Malaria infects 350 to 500 million people each year; kills one million people, mostly children and mostly in Africa; 90 per cent of malaria deaths occur in Africa (75 per cent of deaths occur in African children less than 5 years old due to *P. falciparum*); accounts for one of every five childhood deaths in Africa.
- More than 40 per cent of the world's children live in malaria endemic areas.
- Malaria is a major contributor to anaemia, poor growth and development – about 7 per cent of children who survive cerebral malaria (coma and convulsions common) are left with permanent neurological problems (weakness, spasticity, blindness, speech problems and epilepsy).
- Malaria during pregnancy often results in low birth weight, the leading risk factor for infant mortality and sub-optimal growth and development. Specialist care for low birth weight babies is also often limited.
- In some malaria-endemic areas, approximately 70 per cent of one year-olds have or have had malaria.

## CASE STUDY 6

### Student Questions

1. Compare and contrast the terms: PREVENTABLE and TREATABLE.  
*Preventable means that we can stop malaria infection from happening; treatable means we can provide drugs and health care support if the disease is diagnosed early enough.*
2. What two important methods of vector control are described here?  
*Insecticide treated bed nets and indoor residual spraying.*
3. How do ITNs contribute to the overall reduction in malaria transmission and mortality?  
*They offer a physical barrier to mosquitoes and also contribute to the death of the vector themselves to reduce overall infection rates.*
4. How does indoor spraying contribute to the reduction of malaria transmission and mortality?  
*Kills the vector so transmission is reduced, therefore reducing overall mortality.*
5. WHO recognizes that insecticides are effective in reducing overall malaria transmission rates under certain circumstances. What might these circumstances be?  
*Answers will vary but official answer from WHO is: a high percentage of the structures have adequate sprayable surfaces and can be expected to be well-sprayed; majority of the vector population is endophilic, that is, rests indoors; vector is susceptible to (i.e., will be killed by) the insecticide. Spraying is usually reserved for severe outbreaks and in highly vulnerable places such as refugee camps.*
6. There is ongoing debate around the world about the use of DDT because of the negative effects it, and its breakdown products, have had on wildlife populations in the past. It is a

persistent chemical that exists in the environment many years after its initial use and while it has been banned in Canada for many years, it spreads across borders and appears in the tissues of Arctic mammals as a result of its use in other parts of the world. However, we know that, when used properly, it is an effective tool in the fight against malaria and has been able to save millions of lives. What do you think about the use of chemicals like DDT for the prevention of malaria?

*Answers will vary*

### Additional Information:

- Integrated Vector Management (IVM) is advocated by WHO for the management and reduction of vector populations. It includes:
  - selection of methods based on knowledge of local vector biology, disease transmission and morbidity
  - use of a range of interventions, often in combination and synergistically
  - collaboration within the health sector and with schools and businesses
  - educating local communities and other stakeholders
  - a public health regulatory and legislative framework
- An IVM approach takes into account the available health infrastructure and resources and integrates all available and effective measures, whether chemical, biological or environmental. IVM encourages an integrated approach to disease control.
- The main purpose of indoor residual spraying is to reduce transmission by reducing the survival of malaria vectors entering houses or sleeping units.
- Insecticide-treated nets (ITNs) are a form of effective vector control when coverage rates are high and a large proportion of human-biting by local vectors takes place after people have gone to sleep. They can also be used for personal protection. Their use has repeatedly been shown to reduce severe disease and mortality due to malaria in endemic regions. In community-wide trials in several African settings, ITNs have been shown to reduce all-cause mortality by about 20 per cent or more.



## REVIEW OF MALARIA LIFE CYCLE (STUDENT STATEMENTS)

Cut and distribute one statement per student. Encourage students to put the statements in order according to their collective knowledge of the malaria life cycle.

A malaria-infected female *Anopheles* mosquito takes a blood meal from a human.

Sex cells fuse in the mosquito gut and eventually develop into new malaria parasites (in the form of sporozoites).

Merozoites rapidly divide inside the red blood cells.

*Plasmodium* parasites in the form of sporozoites are injected into the human blood stream and travel to the liver (the site of blood cell production).

Sporozoites rapidly divide in the liver cells to form 30,000 to 40,000 merozoites.

Red blood cells burst and merozoites are released into the blood stream to invade other red blood cells.

A female *Anopheles* mosquito bites a malaria-infected human and ingests both male and female immature gametes (or sex cells) of the malaria parasite.

Some merozoites divide to form gametes (male and female sex cells for *Plasmodium* parasite)

Merozoites leave the liver and invade red blood cells.

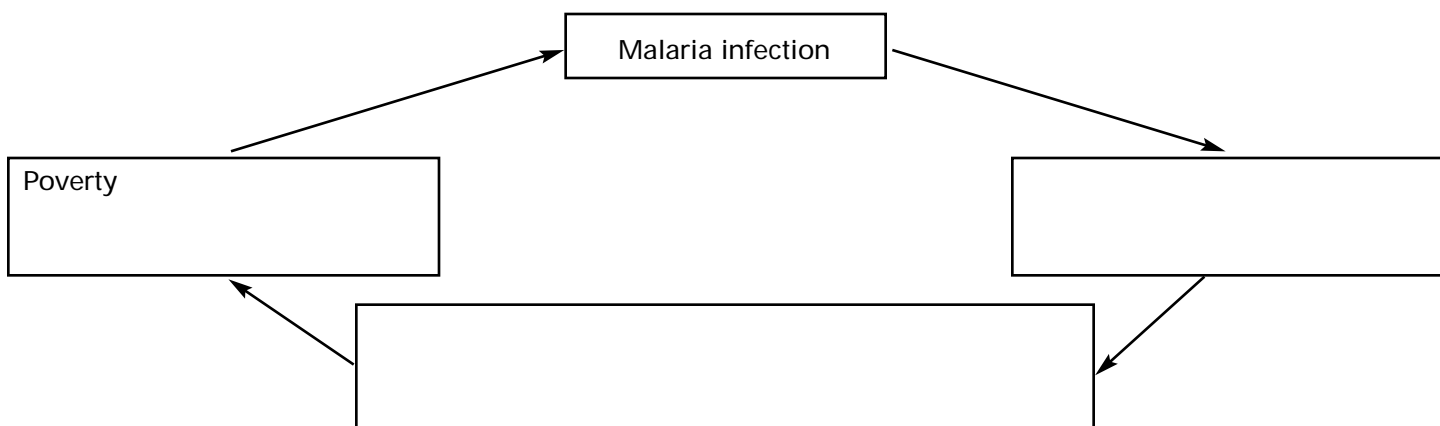
Sporozoites migrate to the mosquito salivary glands.



## SUMMARY OF CASE STUDY FINDINGS

Case Study	Key Findings
1	
2	
3	
4	
5	
6	

1. I would like to learn more about:
2. Knowing what you do now, how do you think the world should respond to the current malaria crisis?
3. Using your knowledge from the case studies, complete the cycle below to outline how malaria contributes to poverty in the world.





## SUMMARY OF CASE STUDY FINDINGS

(described in teacher notes for individual case studies)

1. I would like to learn more about:
2. Knowing what you do now, how do you think the world should respond to the current malaria crisis? How should you respond?

*Answers will vary but encourage discussions about empathy, haves vs. have-nots, international development and investment practices that encourage local development, ownership, sustainability, use of local expertise and capacity development*

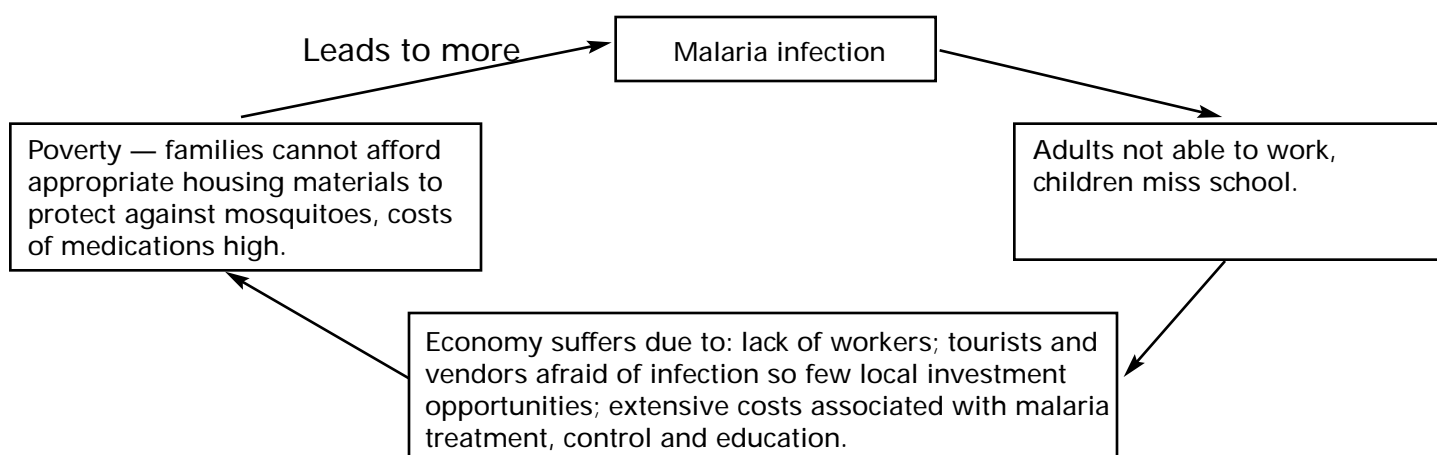
*Some ideas that might arise:*

- *make the provision of bed nets part of a holistic medical approach so that as many families as possible have access*
- *negotiate lower costs for the new generation of malaria drugs so that they are more affordable for families and lower-resource countries*
- *support building methods that allow for better overall vector protection*
- *support overall strengthening of local health systems so that they can provide timely and appropriate care to more people as soon as possible*

*Possible individual calls to action:*

- *develop an awareness campaign for your class/school*
- *volunteer with an organization raising funds for malaria programmes*
- *write letters to local government officials asking them to honour their international development assistance pledges*
- *organize a fundraiser at your school (staying under a bed net, raising funds for bed nets through UNICEF's Spread the Net campaign)*

3. Using your knowledge from the case studies, complete the cycle below to outline how malaria contributes to poverty in the world.





## CULMINATING ACTIVITY: CALL TO ACTION

### AWARENESS/ADVOCACY POSTERS

**Description:** For this activity, students will work in groups of four and select either a method of malarial control **OR** an awareness/advocacy issue related to malaria.

They will create a poster that will be used for a classroom presentation and for use in educating the rest of the school community about health and development issues associated with malaria. The posters should be created as if they are from a local organization requesting development funds or as if they are part of a larger education campaign to raise awareness about malaria-specific issues. An evaluation rubric has been included here.

#### Possible topics:

- insecticide treated bed nets (see Spread the Net campaign ([www.spreadthenet.org](http://www.spreadthenet.org)))
- indoor residual spraying
- chloroquine resistance and advocating for access to affordable artemisinin-containing combination therapy (ACTs)
- the use of DDT to control malaria vector organisms
- the link between malaria and HIV/AIDS
- the socio-economic impact of malaria in Africa
- malaria and global warming
- impact of malaria on children and ways to protect them
- access to health care in developing countries
- malaria and poverty
- malaria and the Millennium Development Goals (MDGs)
- the need to provide financial support to organizations building sustainable malaria interventions
- use of malaria prophylaxis (preventative medications)

#### Prior Knowledge Required

- Students should have a basic understanding of the complex life cycle of the *Plasmodium* parasite.
- Students should understand the social and economic impacts of malaria.
- Students should be able to briefly explain the various methods of intervention in the fight against malaria.

#### Poster Requirements

- Clearly identifies the issue and the author's position related to the issue with supporting data and graphics
- Shows a mature understanding of the issue presented with reference to the greater context of malaria as a development problem
- Includes appropriate graphics/tables/data (with relevant citations) to support issue
- Is eye-catching and colourful and makes a statement that impacts the audience
- Challenges audience to take action in response to the issue presented
- Gives the audience an opportunity to find out more information
- Includes a full reference list on the back of the poster (for both graphics and text information)



## ASSESSMENT/EVALUATION RUBRIC – CALL TO ACTION POSTER/PRESENTATION

Categories/ Criteria	Level 1 (50-59 per cent)	Level 2 (60-69 per cent)	Level 3 (70-79 per cent)	Level 4 (80-89 per cent)
Clear articulation of issue	The issue is not clearly stated or presented.	The issue is vaguely communicated.	The issue is clearly presented and communicated through the text of the poster.	The issue is clearly stated and fully articulated using text and graphics.
Provides support or data for issue	There is limited support for issue presented.	An attempt has been made to present support/evidence for the issue but the link to the issue is weak. Support for the issue is clearly presented	and is linked to the issue with clear evidence.	Supporting data for the issues are both reasoned and persuasively presented.
Understanding of the issue	The issue is not well developed or understood.	The issue is understood in very simplistic terms.	The issue is well understood.	The issue is clearly understood and presented in a mature and thoughtful way with links to other major themes.
Graphics	Graphics do not relate to the topic OR several of the borrowed graphics are not referenced.	All graphics relate to the issue but one or two are not properly referenced.	All graphics are related to the issue and most of them enhance understanding of the issue. An attempt has been made to reference borrowed graphics.	All graphics are related to the issue and make it easier to understand. All borrowed graphics have a reference.
Poster suitability and visual appeal	The poster is very messy and poorly designed. It is too text-heavy and not appealing to the eye.	The poster is reasonably pleasing to the eye but contains some elements that detract from its effectiveness.	The poster has an attractive design and layout and is reasonably neat. The message is clear.	The poster is uniquely attractive and its design, layout and neatness emphasize the message being communicated.
Grammar	The poster contains many grammatical errors.	The poster contains several grammatical errors.	The poster contains one or two grammatical problems.	The poster is free of major grammatical problems.
Critically engages with available resources	Limited sensitivity to source of information; uses one or two references.	Moderate acknowledgement of source of information; uses limited references.	Effective engagement with source of information and makes attempt to access several sources.	Effective and critical engagement with many different sources of information.



## RESOURCES

Canadian International Development Agency (CIDA) – malaria	<a href="http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/FRA-101211511-KPS">http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/FRA-101211511-KPS</a>
Malaria No More	<a href="http://www.malarianomore.org/kids/educational-materials.php">www.malarianomore.org/kids/educational-materials.php</a>
Malaria/parasite games	<a href="http://nobelprize.org/educational_games/medicine/malaria/">http://nobelprize.org/educational_games/medicine/malaria/</a>
Mosquito quiz	<a href="http://www.ucmrp.ucdavis.edu/pages/mosquitoquizanswers.html">www.ucmrp.ucdavis.edu/pages/mosquitoquizanswers.html</a>
Public Health Agency of Canada travel advice	<a href="http://www.phac-aspc.gc.ca/tmp-pmv/info/pal_mal_e.html">http://www.phac-aspc.gc.ca/tmp-pmv/info/pal_mal_e.html</a>
Roll Back Malaria Campaign	<a href="http://www.rbm.who.int/">http://www.rbm.who.int/</a> or <a href="http://www.rollbackmalaria.org">www.rollbackmalaria.org</a>
Spread the Net Campaign	<a href="http://www.spreadthenet.org">www.spreadthenet.org</a>
UN Millennium Development Goals	<a href="http://www.un.org/millenniumgoals/">http://www.un.org/millenniumgoals/</a>
UNICEF (Canada)	<a href="http://www.unicef.ca/">http://www.unicef.ca/</a>
UNICEF (international)	<a href="http://www.unicef.org/health/index_malaria.html">http://www.unicef.org/health/index_malaria.html</a>
US Centre for Disease Control	<a href="http://www.cdc.gov/malaria/">http://www.cdc.gov/malaria/</a>
World Health Organization	<a href="http://www.who.int/topics/malaria/en/">http://www.who.int/topics/malaria/en/</a>



## APPENDIX 1

Fact sheet N°94, May 2007

### FACT SHEET: MALARIA

#### INFECTION AND TRANSMISSION

Malaria is a disease which can be transmitted to people of all ages. It is caused by parasites of the species *Plasmodium* that are spread from person to person through the bites of infected mosquitoes. The common first symptoms—fever, headache, chills, and vomiting—appear 10 to 15 days after a person is infected. If not treated promptly with effective medicines, malaria can cause severe illness that is often fatal.

There are four types of human malaria – *Plasmodium falciparum*, *P. vivax*, *P. malariae*, and *P. ovale*. *P. falciparum* and *P. vivax* are the most common. *P. falciparum* is by far the most deadly type of malaria infection.

Malaria transmission differs in intensity and regularity depending on local factors such as rainfall patterns, proximity of mosquito breeding sites and mosquito species. Some regions have a fairly constant number of cases throughout the year—these are *malaria endemic*—whereas in other areas there are “malaria” seasons, usually coinciding with the rainy season.

Large and devastating epidemics can occur in areas where people have had little contact with the malaria parasite, and therefore have little or no immunity. These epidemics can be triggered by weather conditions and further aggravated by complex emergencies or natural disasters.

#### GLOBAL AND REGIONAL RISK

Approximately, 40 per cent of the world's population, mostly those living in the world's poorest countries, are at risk of malaria. Every year, more than 500 million people become severely ill with malaria. Most cases and deaths are in sub-Saharan Africa. However, Asia, Latin America, the Middle East and parts of Europe are also affected. Travelers from malaria-free regions going to areas where there is malaria transmission are highly vulnerable – they have little or no immunity and are often exposed to delayed or wrong malaria diagnosis when returning to their home country.

#### TREATMENT

Early diagnosis and prompt treatment are the basic elements of malaria control. Early and effective treatment of malaria disease will shorten its duration and prevent the development of complications and the great majority of deaths from malaria. Access to disease management should be seen not only as a component of malaria control but a fundamental right of all populations at risk. Malaria control must be an essential part of health care

development. In contemporary control, treatment is provided to cure patients rather than to reduce parasite reservoirs.

Antimalarial treatment policies will vary between countries depending on the epidemiology of the disease, transmission, patterns of drug resistance and political and economic contexts.

## DRUG RESISTANCE

The rapid spread of antimalarial drug resistance over the past few decades has required more intensive monitoring of drug resistance to ensure proper management of clinical cases and early detection of changing patterns of resistance so that national malaria treatment policies can be revised where necessary. Surveillance of therapeutic efficacy over time is an essential component of malaria control. Recent efforts to scale-up malaria control in endemic countries throughout the world including increased support for commodities and health systems, as well as the proposed price subsidy on artemisinin-based combination therapies (ACTs) is resulting in greater access to and a vastly increased use of antimalarial medicines, in particular ACTs. This is leading to a much higher degree of drug pressure on the parasite which will almost certainly increase the likelihood of selecting for resistant parasite genotypes. There are currently no effective alternatives to artemisinins for the treatment of *P. falciparum* malaria either on the market or towards the end of the development pipeline.

The parasite's resistance to medicines continues to undermine malaria control efforts. WHO has therefore called for continuous monitoring of the efficacy of recently implemented ACTs, and countries are being assisted in strengthening their drug resistance surveillance systems. In order to preserve the efficacy of artemisinins as an essential component of life-saving ACTs, WHO has called for a ban on the use of oral artemisinin monotherapies, at various levels, including manufacturers, international drug suppliers, national health authorities and international aid and funding agencies involved in the funding of essential antimalarial medicines.

## PREVENTION: VECTOR CONTROL AND INTERMITTENT PREVENTIVE THERAPY IN PREGNANT WOMEN

The main objective of malaria vector control is to significantly reduce both the number and rate of parasite infection and clinical malaria by controlling the malaria-bearing mosquito and thereby reducing and/or interrupting transmission. There are two main operational interventions for malaria vector control currently available: Indoor Residual Spraying of long-acting insecticide (IRS) and Long-Lasting Insecticidal Nets (LLINs). These core interventions can be locally complemented by other methods (e.g. larval control or environmental management) in the context of Integrated Vector Management (IVM). Effective and sustained implementation of malaria vector control interventions (IRS or LLINs) requires clear political commitment and engagement from national authorities as well as long-term support from funding partners.

Pregnant women are at high risk of malaria. Non-immune pregnant women risk both acute and severe clinical disease, resulting in up to 60 per cent fetal loss and over 10 per cent maternal deaths, including 50 per cent mortality for severe disease. Semi-immune pregnant women with malaria infection risk severe anaemia and impaired fetal growth, even if they

show no signs of acute clinical disease. An estimated 10 000 of these women and 200 000 of their infants die annually as a result of malaria infection during pregnancy. HIV-infected pregnant women are at increased risk. WHO recommends that all endemic countries provide a package of interventions for prevention and management of malaria in pregnancy, consisting of (1) diagnosis and treatment for all episodes of clinical disease and anaemia and (2) insecticide-treated nets for night-time prevention of mosquito bites and infection. In highly endemic falciparum malaria areas, this should be complemented by (3) intermittent preventive treatment with sulfadoxine–pyrimethamine (IPT/SP) to clear the placenta periodically of parasites.

## INSECTICIDE RESISTANCE

In spite of increased national and international efforts to scale up cost-effective malaria vector control interventions and maximize the protection of populations at risk, significant challenges continue to threaten these objectives and the sustainability of achievements. Challenges include increasing resistance of vector mosquitoes to insecticides, the behaviour and ecology of local malaria vectors – which often change as a result of vector control interventions — and the diminishing number of available insecticides that can be used against malaria vectors (adulticides).

There are currently no alternatives to DDT and pyrethroids and the development of new insecticides will be an expensive long-term endeavour. Therefore, immediate sound vector resistance management practices are required to assure the continued utility of the currently available insecticides. At present there is only limited evidence of the impact of various resistance mechanisms on the efficacy of vector control interventions, whether they are implemented singly or in combination.

Recent evidence from Africa indicates that pyrethroid and DDT resistance is more widespread than anticipated. It is believed that the same level of resistance will have a more detrimental impact on the efficacy of IRS than on that of LLINs, but evidence for this is very limited. Networks for vector resistance monitoring still need greater strengthening in order to make resistance detection a routine operational feature of national programmes, particularly in countries in Africa and the Eastern Mediterranean region. Regional level databases feeding into a global database accessible by governments, scientists and policy-makers would greatly assist in the rational use and deployment of vector control interventions.

## SOCIOECONOMIC IMPACT

Recent evidence from Africa indicates that pyrethroid and DDT resistance is more widespread than anticipated. It is believed that the same level of resistance will have a more detrimental impact on the efficacy of IRS than on that of LLINs, but evidence for this is very limited. Networks for vector resistance monitoring still need greater strengthening in order to make resistance detection a routine operational feature of national programmes, particularly in countries in Africa and the Eastern Mediterranean region. Regional level databases feeding into a global database accessible by governments, scientists and policy-makers would greatly assist in the rational use and deployment of vector control interventions.



## GLOSSARY

<b>ACT</b>	Artemisinin-based Combination Therapy; the most effective treatment for malaria although cost remains a barrier for many in need.
<b>Anopheles</b>	The genus of mosquito responsible for malaria infection in humans; acts as a host and vector for the malaria-causing <i>Plasmodium</i> organism.
<b>Host</b>	The organism from which a parasite obtains its nutrition and/or shelter. A human acts as a host for the <i>Plasmodium</i> parasite causing malaria.
<b>ITN</b>	Insecticide-Treated Nets; used while sleeping for mechanical and chemical protection against mosquito bites. A good picture and further information can be seen at <a href="http://www.rollbackmalaria.org/cmc_upload/0/000/015/368/RBMInfosheet_5.htm">http://www.rollbackmalaria.org/cmc_upload/0/000/015/368/RBMInfosheet_5.htm</a> .
<b>IVM</b>	Integrated Vector Management; an integrated locally-relevant approach used for the control of mosquitoes in malaria-prone areas. For more information: <a href="http://www.who.int/malaria/integratedvectormanagement.html">http://www.who.int/malaria/integratedvectormanagement.html</a> .
<b>Malaria</b>	An infectious disease caused by protozoan parasites of the genus <i>Plasmodium</i> that are transmitted through the bite of <i>Anopheles</i> mosquitoes.
<b>MDG</b>	Millennium Development Goals; eight goals established by the United Nations in 2000 that form a blueprint for the reduction of global poverty by 2015. Goals include targets to improve maternal health, reduce HIV/AIDS and malaria rates, improve school enrolments, improve environmental health and improve gender imbalances. See <a href="http://www.un.org/millenniumgoals/">http://www.un.org/millenniumgoals/</a> .
<b>Parasite</b>	An organism that lives on or in another organism (the host) and takes its nourishment from that other organism; parasites cannot live independently. With malaria, <i>Plasmodium sp.</i> is the parasite that requires a human or mosquito host to survive.
<b>Plasmodium</b>	The genus of the organism responsible for the malaria infection; those species causing human malaria infection include <i>Plasmodium falciparum</i> , <i>Plasmodium vivax</i> , <i>Plasmodium malariae</i> , <i>Plasmodium ovale</i> .
<b>RBM</b>	Roll Back Malaria Partnership; launched in 1998 by the World Health Organization (WHO), UNICEF, the United Nations Development Programme (UNDP), and the World Bank to provide a coordinated global approach in the fight against malaria. <a href="http://www.rollbackmalaria.org">www.rollbackmalaria.org</a> .

<b>Symptom</b>	Any change in the body or its function that is attributable to a given disease or condition. For example, symptoms of the common cold include runny nose and watery eyes.
<b>UNICEF</b>	United Nations Children's Fund; an organization of the United Nations committed to health, education, equality and protection of all children around the world <a href="http://www.unicef.org/www.unicef.ca">www.unicef.org/www.unicef.ca</a> .
<b>Vector</b>	A carrier or "bearer"; with malaria, the mosquito serves as a vector, transmitting the <i>Plasmodium</i> organism to humans during successive bites.
<b>WHO</b>	World Health Organization; the directing and coordinating body for health within the United Nations system. <a href="http://www.who.int/about/en/">http://www.who.int/about/en/</a> .





World Vision  
*Alive at Five: The Silent Global  
Crisis of Child Deaths*

World Vision



ACGC   
Alberta Council for Global Cooperation



# Alive at Five

## The Silent Global Crisis of Child Deaths

A multi-literacy, multi-media  
resource for grades 7 to 10.

Modules support outcomes  
in language arts, mathematics,  
social studies, media studies,  
communications technology, arts,  
health and science



lack developing  
infant  
child  
survival  
goals  
bias  
strategies  
literacy  
tools  
mortality  
development  
lottery  
global  
action  
media  
deaths  
births  
gender  
health  
see  
disease  
resource  
technology  
access  
facts  
role  
poverty  
five  
problems  
reduce  
leaders  
resigned

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Produced by World Vision Canada  
Education and Public Engagement  
1 World Drive, Mississauga, ON L5T 2Y4

Phone: 1-800-268-1650  
Email: [global\\_ed@worldvision.ca](mailto:global_ed@worldvision.ca)

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Writer: Sarah Hutchison  
Editor: Nancy Del Col  
Copy Editor: Karen Stiller  
Design: Brian Wiens, World Vision Creative Solutions

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# Alive at Five

## The Silent Global Crisis of Child Deaths

In the time it takes to read this sentence, a child under the age of five will die. That child likely lived in a developing country and died from causes that were preventable or treatable. The odds are good this child was malnourished and born to a sick or malnourished mother as well. The medicines and health interventions he or she needed are available, but only for select populations. This child will be mourned by family and friends, but in the rest of the world this death will go unnoticed, because every four seconds the same story repeats.

### Note to Educators

*Alive at Five* is a multi-literacy, multi-media approach to studying an important and current global issue. Students will explore the topic of global child health and survival while developing media, technological, oral, written, visual, kinesthetic and numerical literacy skills.

This resource provides tools and activities supporting curricular outcomes in language arts, mathematics, social studies, media studies, communications technology, dramatic and visual arts, and health sciences. The activities are best used with grades 7 through 10, but are easily adapted to other grade levels or less formal learning groups or settings.

The modules are designed to address differentiated learning styles by including stand-alone lessons, a multi-literacy approach, the utilization of technological tools, increasing complexity in thinking skills, and a variety of strategies for building student knowledge and constructing responses. Some evaluation tools are included, but teachers are encouraged to use their own formative and summative evaluation strategies.

Icons at the start of each module identify literacies addressed in the activities. Please refer to the key below:



**Please note:** This resource includes links to various websites that access online tools and extend background information for teachers. World Vision Canada does not guarantee the content of these websites as they are subject to change, nor should the content of these websites be understood to reflect World Vision's values.

# Alive at Five

## The Silent Global Crisis of Child Deaths (cont'd)

### With this resource students will...

- Understand and draw meaning from various types of texts
- Research information from various sources
- Critically analyze media messages for bias, trustworthiness and relevancy
- Create graphs and use data management to interpret patterns in mathematical relationships
- Produce reflective writing, perform orally and create artwork
- Use multimedia technology and appropriate conventions and techniques to create a media production
- Work constructively in groups and use effective listening and communication skills
- Understand factors impacting global child survival and the importance of health interventions in the first five years of life

### Supporting Youth Voice and Action

Developing attitudes and skills to engage with global issues requires opportunities to acquire new information, develop understanding and empathy, and critically reflect on the issues. These skills are developed over time and through a variety of approaches.

*Alive at Five* helps students think critically about the topic of child health and survival, while encouraging constructive expression of their opinions. Use the modules, extension activities and recommended resources in *Alive at Five* to build the attitudes and skills students need to exercise meaningful local and global citizenship actions.

# Alive at Five

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# Global Child Survival:

## An Overview

In the year 2000, leaders of the world's wealthiest nations – including Canada – made a commitment to the world's children. They promised that by the year 2015, two thirds fewer children would die from preventable causes than in 1990 (Millennium Development Goal 4). Currently, we are not on track to keep that promise.

Every day, more than 24,000 children die before reaching their fifth birthday. Most of these children live in developing countries and die from causes that are preventable or treatable.

The main identified causes of death are: pneumonia, diarrheal diseases, pre-term births, asphyxia and malaria.<sup>1</sup> In 35 to 50% of these deaths, malnutrition is an underlying factor.

Many factors make it difficult to reduce child mortality. Lesser-developed countries struggle with inadequate health services, lack of clean water and sanitation, illiteracy (especially among women and girls), gender discrimination, and isolation of communities due to poor infrastructure, natural disasters and conflict.<sup>2</sup>

### Neonatal and Maternal Health

A significant proportion of under-five child deaths occur in the newborn period, the first 28 days of life. Of an estimated 8.8 million deaths of children under five in 2008, more than 40 per cent occurred in the newborn period. That is more than 2 million children dying the day they are born, and another two million in the first month.<sup>3</sup>

While some countries have seen improvement in reduction of infant deaths, the slow progress in other regions, such as sub-Saharan Africa, is of great concern. This is due to many factors, one being the challenge of improving the health of mothers. Currently, of the eight Millennium Development Goals (MDGs), it is Goal 5, improving maternal health, which is least realized. It is widely accepted that we will not achieve MDG Goal 4, reducing child mortality, without also addressing maternal health.

### Addressing the Problem

Preventing the deaths of millions of children requires an integrated approach and low-cost interventions such as: nutrition training; distribution of Vitamin A, iodized salt, and iron; education in breastfeeding, hygiene and sanitation practices; birth spacing and skilled birth attendants; access to antibiotics and immunizations; oral rehydration therapy (ORT); and ready-to-use therapeutic foods (RUTFs). Changes are also needed to improve healthcare facilities and systems, remove social barriers for women, and address indirect factors, such as illiteracy, that cause poor health.

World Vision takes a community-based multi-sector approach to improving child health. Nutrition and health are linked with agriculture, water and sanitation, household food security and education to ensure greater reach and impact.<sup>4</sup>

### The Millennium Development Goals

In September 2000, at the largest ever gathering of world leaders, 189 United Nations member countries endorsed the Millennium Declaration. This Declaration led to the adoption of eight major development goals to reduce poverty, hunger, and ill-health, and tackle gender inequality, lack of education, lack of access to clean water and environmental degradation by the year 2015. These eight goals are known as the Millennium Development Goals (MDGs).

<http://www.un.org/millenniumgoals/>

<sup>1</sup> World Vision Canada, 2009.

<sup>2</sup> UNICEF, Child Survival: A Global Challenge, [http://youth.unicefusa.org/assets/pdf/teachunicef-youthreporhighschool\\_final.pdf](http://youth.unicefusa.org/assets/pdf/teachunicef-youthreporhighschool_final.pdf) (2008).

<sup>3</sup> The Lancet: Press Release. "Mixed Progress in Reducing World Under-5 Mortality, with Most Regions Not on Track to Meet Millennium Development Goal 4." September 10, 2009.

<sup>4</sup> Peterson, Anne., "Impatient for Revolution", Global Future, Monrovia: World Vision, 2007.

# Alive at Five

## Millennium Development Goals - An Overview

### The G8 Summit: Opportunity for Action

2015 is the target year for achieving the eight Millennium Development Goals. As 2010 approaches, we reach a critical point in efforts to realize a two-thirds reduction in child mortality. The G8 Summit in June 2010, and the United Nations MDG review meetings in September 2010, will stir debate on development topics. With Canada acting as the Chair of the G8 Summit in 2010, World Vision Canada is working with partner NGOs to influence Canadian leaders into making child health a priority agenda item at this international gathering. For more information on World Vision's child health campaign, visit [Fivefor5.ca](http://Fivefor5.ca)



# Module 1

## Module 1: Understanding the Basics

Social Studies, Health, Science, Dramatic Arts



Oral



Written



Visual



Kinesthetic

### Students will:

- Use visual, spatial, kinesthetic, listening and critical thinking skills
- Draw meaning from various texts and work constructively in groups
- Compare the health of children in Canada to those in other countries
- Understand factors contributing to the health and well-being of children
- Investigate low cost and effective solutions to under-five child mortality

### Module 1

- Opening Challenges (25 mins)
- Activity 1: Survive to Five (45 mins)
- Activity 2: Understanding Problems and Solutions (75 mins)
- Supplementary Materials: *Leader's Script*, *Role Play Cards* and *Fact Sheets*

## Activity 1: Survive to Five: The Birth Lottery

### Materials

- *Survive to Five Leader's Script* (p. 15), string or tape, paper and markers, world map or globe, red, green and yellow dot stickers
- Class set of *Survive to Five Role Play Cards* (Supplementary Materials, pp. 57-60)
- Download and photocopy a class set of *What Rights?*<sup>5</sup> and *Born Lucky? Then pay for it*<sup>6</sup> (see Extension)

### Opening Challenge

Ask students to brainstorm in pairs the most important things a child needs to be healthy. List these as the “ingredients” of a healthy child. Award points out of 100 to each ingredient based on its importance (the greater the importance, the more points). The list should add up to 100.

*Math extension:* Create a pie graph to represent the percentages of each ingredient out of 100.

Join pairs into groups of four to develop a consensus on the five most important ingredients. Groups share findings with the whole class, which votes on the top five most important ingredients.

*Discussion:* Was it easy or difficult to prioritize the ingredients? How was consensus achieved?

<sup>5</sup> UNICEF, *What Rights?* [www.unicef.org/magic/media/documents/what\\_rights\\_flyer\\_english.pdf](http://www.unicef.org/magic/media/documents/what_rights_flyer_english.pdf) (2009).

<sup>6</sup> Kelly, C., “Born Lucky? Then pay for it”, [thestar.com](http://thestar.com), May 2, 2009.

# Module 1

## Instructions

Introduce the *Survive to Five* role play by telling students there are eight main factors (see *Leader's Script*, p. 15) impacting the odds of children living to the age of five, the critical age for ensuring their chance to reach adulthood.

In this activity they will see the global disparities in child health in 24 different countries, including Canada, and the obstacles children and families in developing countries face in accessing basic rights to health care, food, water and education. They will also understand that child survival depends on the countries in which they are born: if they are lucky, and win the “birth lottery” by being born in developed countries, their chances of survival are almost guaranteed.

- 1) Locate a large open playing area. Using tape or string, mark a “Start Line” across the middle of the area long enough for all participants to stand on in a single row. From the start line, walk 15 steps forward and mark another line across the play area, parallel to the start line. This line represents “Healthy at Five”, or the best odds of survival to the age of five. Walk 15 steps back from the start line and mark a third parallel line across the play area. This is the “Death at Five” line, representing the lowest odds of survival to the age of five. NOTE: Use a standard measurement to represent a single step.
- 2) Using paper and markers, create a heading sign for each of the eight *Factors Affecting Child Survival* (see *Survive to Five Leader's Script*, p. 15). Copy the script for each factor, cut out, and paste to the back of the heading signs.
- 3) Ask players to listen carefully while an introduction is read from the *Survive to Five Leader's Script*. They should close their eyes and visualize the scenario being described.
- 4) Players open their eyes. Hand out a *Survive to Five Role Play Card* to each one. Instruct them to read the card carefully, choose one of the children's names (male or female) and keep their identity and country secret.
- 5) Players line up in a single row facing the “Healthy at Five” line.

### Rx for Survival: games and role plays

#### Disease Warriors: Zap

Play this game to understand how vaccines work to protect against infectious disease. (Find Zap on page 3 of Disease Warriors).

[http://www.pbs.org/wgbh/rxforsurvival/series/teachers/pdf/rx\\_guide\\_diseasewarriors.pdf](http://www.pbs.org/wgbh/rxforsurvival/series/teachers/pdf/rx_guide_diseasewarriors.pdf)

#### Getting Your Money's Worth

This game shows how a country's average life expectancy and infant mortality rate relate to its healthcare spending.

[http://www.pbs.org/wgbh/rxforsurvival/campaign/givetime/pdf/Rx\\_Getting\\_Money\\_Worth.pdf](http://www.pbs.org/wgbh/rxforsurvival/campaign/givetime/pdf/Rx_Getting_Money_Worth.pdf)

#### Delivering the Goods

Explore the difficulties aid organizations face in getting medical care to people who need it by developing a plan for delivering a flu vaccine to citizens of a remote town.

[http://www.pbs.org/wgbh/rxforsurvival/series/teachers/pdf/rx\\_guide\\_deliveringgoods.pdf](http://www.pbs.org/wgbh/rxforsurvival/series/teachers/pdf/rx_guide_deliveringgoods.pdf)

# Module 1

- 6) Hold up a heading sign for the first factor in child survival, Birth Weight. Read aloud the script on the back of the sign and instructions for moving forward or backward. Closing their eyes while the script is read will encourage players to visualize and stay in role.
- 7) Repeat step 6 for the remaining seven factors, proceeding in the order listed. After each factor is completed, post the heading signs where they can be seen.
- 8) Once all eight factors have been read out, players will be located somewhere between the “Healthy at Five” and “Death at Five” lines. Instruct them to stay in their positions and read out their countries and role-play names to the group.

## Discuss

- What did you see happening in this activity? How did that make you feel?
- What surprised you the most during this activity?
- Name the biggest health challenge for your role-play child in his/her country.
- What message would you send to children standing at or near the lines farthest away from you?

## Extensions

- 1) Distribute coloured dot stickers to players: green stickers to those closest to the “Healthy at Five” line; red stickers to those closest to “Death at Five”; yellow stickers to all others. Ask players to place stickers on their role-play countries on a world map or globe. What patterns are there in the placement of the coloured stickers on the map? Why do you think these patterns exist?
- 2) Refer to the UNICEF pamphlet *What Rights?* on the UN Convention on the Rights of the Child (UNCRC). Which rights can be categorized as survival rights? Which ones did your role-play child not have protected? Are all these rights protected for children in Canada?
- 3) Examine the concept of the birthright lottery. Read the article *Born Lucky? Then pay for it.* Explain the concept of a *global levy*. Debate whether Canada and other wealthy nations should participate in this idea.

## Activity 2 Understanding Problems and Solutions

### Materials

- Access to computers and Internet (optional)
- Class set of *Fact Sheets* (pp. 51-56)
- Seven header signs with one of the following causes of under-five mortality on the front and the associated percentage on the back:

Neonatal Causes – 37%

Diarrheal Diseases – 17%

Measles – 4%

Malnutrition underlies 35 – 50% of all deaths<sup>7</sup>

Pneumonia – 19%

Malaria – 8%

AIDS – 3%

### Opening Challenge

Ask students to individually brainstorm seven to 10 main causes of death for children under the age of five around the world. Arrange answers in a *word cloud* (see text box). The text size of each idea reflects its importance, so the more they think children die from that cause, the larger the text should be. Post all the word clouds for students to see.

#### What is a Word Cloud?

A *word cloud* – also called a *tag cloud* or *weighted list* – is a visual collection of a list of words that describe a theme or idea. The importance or popularity of a single word or tag is represented by its size in the list.

See <http://www.wordle.net/> for examples.

*Discuss:* Which ideas are common? Any ideas you had not thought of? Which ones would you like to know more about?

Choose six student volunteers. Give each of them one of six prepared signs: pneumonia, malaria, AIDS, diarrheal diseases, measles, and neonatal causes. Line them up facing the class with the headings on the signs facing out. Use the *Fact Sheets* to briefly describe each direct cause of child mortality.

The class provides suggestions for ordering the six students into a line ranking them from the least cause of child mortality to the greatest. Once an order is agreed upon, the volunteers turn the signs around to reveal the corresponding percentages. Re-order the line-up if necessary.

*Discuss:* How did your ideas about the causes of child mortality compare with the actual causes? What do most of these causes have in common? (They are preventable.)

Choose another student volunteer to hold the malnutrition sign with the percentage facing in. Explain that malnutrition is both a direct cause and an underlying factor (or indirect

<sup>7</sup> UNICEF, Childinfo: Child Mortality Progress, [http://www.childinfo.org/mortality\\_progress.html](http://www.childinfo.org/mortality_progress.html), Sept 2009.

# Module 1

cause) in under-five deaths because it decreases immune system health. Ask students to guess what percentage of child deaths might be attributable to malnutrition. Reveal the answer.

## Instructions

Explore some of the direct and indirect causes of child mortality in more detail using the *Fact Sheets* (pp. 51-56) and one or more of the suggested activities (see *Using the Fact Sheets* text box).

After students have worked with the fact sheets, discuss the links between the different causes and interventions. Create a class mind map to show the connections visually.

*Note:* pneumonia, malaria and diarrheal diseases are direct causes of child mortality, while water and sanitation and maternal health are indirect factors. Malnutrition is considered both a direct cause and an indirect factor. In cases of severe acute malnutrition it can lead to death, but malnutrition also makes children more susceptible to deadly diseases like pneumonia and diarrhea.

## Discuss

- Discuss the connections between the direct and indirect causes of child mortality.
- What interventions or solutions exist to tackle the complexities of improving child survival? Can you think of others? Who is responsible for implementing these solutions?

## Using the Fact Sheets

### Summarize and clarify

Pairs of students read a fact sheet. One partner verbally summarizes the contents to the other without reading from the sheet. The other partner then clarifies what was heard by repeating the information. The summarizer corrects anything that was missed or misinterpreted.

### KWL Stations

Create charts with the headings: “What I Know”, “What I Want to Know”, and “What I Learned”. Students rotate in six small groups through fact sheet stations. Before moving to a new station they fill in the first two columns for that fact sheet and fill in the third after reading and discussing the Think and Debate questions. Each group contributes to a collective response on one of the fact sheets for presentation to the class.

### Expert groups

Students work in groups to become experts on one of the fact sheet topics. New groups are formed with one member from each expert group. Each expert teaches the others in the group about their topic.

### Debates

Debate the questions from the fact sheets by researching pro and con arguments and hosting a formal debate.

### Wordles

Visit [www.wordle.net](http://www.wordle.net) to create word clouds using text from the fact sheet. Students print and post the word clouds for a “walk past”, noting which ideas are emphasized most in each fact sheet and why.

## Extensions

- 1) Explore techniques used in effective public health ad campaigns. Refer to the *Design Your Own Health Campaign* resource listed in *Further Resources* (p. 65). Design a public health ad campaign around one of the issues from the fact sheets.
- 2) Respond to the following quotations in informal discussions or formal debates, within the context of the issue of child health and survival:
  - i) *Only the educated are free.* ~ Epictetus (Greek philosopher)
  - ii) *It is poverty to decide that a child must die so that you may live as you wish.*  
~ Mother Theresa
  - iii) *Millions of children are dying because they are poor, forgotten or just unlucky enough to be born in the wrong place.* ~ David Morley (Save the Children Canada)
  - iv) *Children are the world's most valuable resource and its best hope for the future.*  
~ John F. Kennedy (35th US President)



# Survive to Five Leader's Script

## Role Play Introduction

You are about to play a game of survival. In this game, you are a child under the age of five in a country somewhere in the world. In your country, you may be lucky. There is good health care for children, you've been vaccinated for protection against preventable diseases, your parents have jobs, and you go to school. On the other hand, you might not be so lucky in the "birth lottery." In the country where you were born, children die for reasons linked to poverty, such as malnutrition and diseases like pneumonia, malaria, and AIDS. Nutritious food is in short supply, there is poor access to medical care, your parents are unemployed and children die every day.

Your goal in this game is to survive to your fifth birthday. Each of you will get a country identity card and a name. Read your card carefully and keep it private. Based on what is written there, you will be instructed to take steps forward towards good health and survival, or steps back towards illness and possible death. Let's begin.

## Factors Affecting Child Survival

Cut out each factor and attach to the back of a sign naming the factor on the front. Read aloud in order:

### 1. Birth Weight

In many developing countries, pregnant women don't get the extra food or special health care needed to deliver healthy weight babies. A child born underweight may remain stunted all her life, and give birth to underweight babies herself. Children who cannot reach a healthy weight are stunted and struggle to develop. They have weaker immune systems, putting them at risk for infections and serious illness. Underweight children can also have lowered brain function and learning difficulties in school.

**Take one step forward if your birth weight was above 2500 g (5.5 lbs); take one step back if it was below.**

### 2. Health Care

In Canada, everyone has access to free health care, no matter your age or how much money you have. Children get free vaccinations to guard against preventable diseases such as measles or polio. However, in many countries there are obstacles to accessing health care. Medical clinics may be far away and people cannot pay the travel costs to get there. Drugs may be too expensive or not even available to buy. Sometimes visiting a doctor is less important than harvesting crops and feeding families. All these barriers mean children may not get free, life-saving vaccinations, and sick or malnourished children may go without proper medical care.

**Take one step forward if you had your vaccinations; take one step back if you did not.**

**Take one step forward if a health clinic is in your community; take one step back if it is far away.**

# Survive to Five Leader's Script

## 3. Food

Proper nutrition is one of the most important factors for good health. In Canada most children can access an abundance of high quality food, but many children in developing countries eat only one or two meals a day and sometimes go days without eating. Even if children get regular meals they can be undernourished if their diet is mainly made up of filler carbohydrates such as rice, corn or cassava. Malnourished children lacking in protein, vitamins and minerals are susceptible to wasting and death from preventable diseases. Children have a much better chance of survival if their mothers exclusively breastfeed until six months of age. From six months to two years of age, high quality food and proper feeding practices are essential to survival and good health later on in life.

**Take two steps forward if you get three meals a day; take two steps back if you do not.**

**Take one step forward if your diet includes protein; take one step back if your diet is mainly carbohydrates.**

**Take one step forward if you were exclusively breastfed as an infant; take one step back if you were not.**

## 4. Water and Sanitation

Canada is blessed with an abundance of fresh, renewable water sources and good public sewer systems. However, large numbers of people around the world do not have access to safe and clean water, toilets or water treatment systems. The water they drink contains dangerous parasites and bacteria that cause disease and diarrhea in children. Untreated diarrheal disease leads to dehydration and is a leading cause of death in children under five.

**Take one step forward if you have access to clean water; take one step back if you do not.**

**Take one step forward if there is a toilet in or near your home; take one step back if there is not.**

## 5. Education

Free public education systems, like those in Canada, provide access to schooling for all children. But for many children worldwide, school is not an option. If their parents do not have money to pay school fees, children may have to work or stay home to help with chores. Educated children are more likely to be healthy and get good jobs in the future. They are also safer from abuse than those who work or live on the streets. Girls are often kept out of school to help with younger siblings at home while their brothers go to school. This has a negative future impact because educated mothers know about proper food preparation, how to care for themselves during pregnancy, and how to access health care, so are able to raise healthier children.

**Take one step forward if you attend school; take one step back if you do not.**

**Take two steps back if you are a girl and not in school.**

**Take one step forward if your mother is educated; take one step back if she is not.**

# Survive to Five Leader's Script

## 6. Malaria

Malaria is a serious and sometimes fatal disease transmitted by certain types of mosquitoes carrying the plasmodium parasite. It is a leading cause of death worldwide. Although we have many mosquitoes in Canada, none of them carry the malaria parasite. Malaria symptoms include fever, headache and vomiting. Left untreated, it can kill. It is estimated that a child dies every 30 seconds from malaria. Mosquito bed nets treated with insecticides are cheap to produce and are the most effective way of preventing malaria, but in many countries where malaria is a problem less than half of children under the age of five sleep under a treated bed net.

**Take one step forward if you live in an area without malaria; take one step back if you live in an area that has it.**  
**Take one step forward if you need a bed net and have one.**

## 7. HIV and AIDS

The Human Immunodeficiency Virus, or HIV, causes AIDS, a fatal disease of the immune system that affects more than 33 million people worldwide. The rate of AIDS in Canada is very low, but in some countries is as high as one in every four adults. There is no cure for AIDS, but life-saving anti-retroviral drugs exist that can control it. In Canada, people with AIDS get these drugs for free, but for many people in developing countries these drugs are either not available or difficult to get. Many children have been orphaned because one or both of their parents died from AIDS. Some infants are infected by their mothers during childbirth. Children who have lost their mothers are 10 times more likely to die themselves.

**Take one step forward if both your parents are alive; take one step back if one or both of your parents have died.**  
**Take one more step back if your mother has died.**

## 8. Employment

Parents who work can pay the costs of raising healthy children. This includes paying for nutritious food, medical costs, dental care and schooling. Children of unemployed parents may get poorer quality food and little access to health care. They are also more likely to be working to bring money into the family or to pay for their own school fees. Children who are not in school are more vulnerable to working in unsafe and unhealthy conditions, such as scavenging in garbage dumps.

**Take one step forward if one parent has a job; take two steps forward if they both do.**  
**Take one step back if one parent is unemployed; take two steps back if they both are.**  
**Take one more step back if you or your siblings must work instead.**

# Module 2

## Module 2: Child Health in the News

Language Arts, Media Studies, Communications Technology



Oral



Written



Visual



Media

### Students will:

- Identify bias and value judgments and explore the ways bias appears in the news
- Critically respond to and evaluate various types of media
- Use appropriate conventions and techniques to create a media release
- Design and participate in a mock news conference

### Module 2

- Activity 1: Understanding Bias (100 mins)
- Activity 2: Examining Media Coverage of Global Child Health (50 mins)
- Activity 3: Filling the Gap Press Conference (150 mins)
- Supplementary Materials: *Student Handouts: Analyzing Media Messages* and *Global Child Health in the Media; Fact Sheets*

## Activity 1: Understanding Bias

### Materials

- Class set of *Student Handout: Analyzing Media Messages* (p. 23)
- Download and copy a class set of *How to Detect Bias in the News*<sup>8</sup>
- Magazines, newspapers, videos from sources such as TV, movies, YouTube
- Access to computers and the Internet

### Opening Challenge

The headlines below appeared in different news sources on the same day. They covered the identical story: statistics released on September 10, 2009 stating that child mortality rates had dropped in the last year. Provide students with a definition of *bias* (see text box) and ask them to identify bias, or lack of it, in these headlines. Discuss their answers.

**Bias:** a tendency or preference towards a particular perspective or result, especially when the tendency interferes with the ability to be impartial or unprejudiced. Bias is generally seen as a “one-sided” perspective.

Wikipedia, Bias (September 2009)

- 1) Mortality reduction is good news
- 2) Child mortality continues to decline, but not fast enough
- 3) UNICEF: Number of deaths of children under 5 continues to drop

<sup>8</sup> Media Awareness Network, *How to Detect Bias in the News*,  
[http://www.media-awareness.ca/english/resources/educational/handouts/broadcast\\_news/bw\\_bias\\_in\\_the\\_news.cfm](http://www.media-awareness.ca/english/resources/educational/handouts/broadcast_news/bw_bias_in_the_news.cfm) (2009).

# Module 2

Read about all the ways that bias is created in news reporting using the *Media Awareness Network*<sup>9</sup> handout *How to Detect Bias in the News*. Brainstorm examples of biased messaging in media such as print news, advertising, movies, TV shows and social media such as YouTube. You may also bring examples into class to analyze.

*Discuss:* What images or words stand out? What viewpoint is presented? Is it positive, negative, stereotyped, emotionally charged? Whose perspectives or values are presented? Identify values or viewpoints that are not represented (e.g. gender, race, persons with disabilities).

Ask students to rewrite or refine the definition of bias based on their own understanding

## Instructions

Give students copies of *Student Handout: Analyzing Media Messages* (p. 23). In this short independent assignment they use Internet search engines to choose and compare three media pieces on the same topic, analyze the bias in them, and determine the trustworthiness and relevancy of each.

## Discuss

After completing the analyses of media messages, students form groups of three to share their findings. The following questions can guide their discussions.

- Describe the differences in how your chosen media pieces covered the same story or topic.
- What bias did you detect in the pieces you chose? What criteria did you use to determine this?
- When you search for current news or information on a topic, how many news outlets do you visit? Which ones are your favourites?
- Is it important or even necessary to go to more than one source for news or information? What if the information conflicts?

## Extension

Find an example of bias in a news article or editorial and write a letter to the writer and/or editor of the newspaper challenging the biased point of view.

<sup>9</sup> Media Awareness Network,  
<http://www.media-awareness.ca/> (2009).

# Module 2

## Activity 2

### Examining Media Coverage of Global Child Health

#### Materials Needed

- Copy class sets of *Student Handout: Global Child Health in the Media* (p. 24), *Fact Sheet: Pneumonia* (p. 52), *Fact Sheet: Diarrheal Diseases* (p. 53), *Fact Sheet: Malaria* (p. 55)
- Access to computers and the Internet

#### Instructions

One way that news media reflect bias is in the choices made about which stories to cover. In this activity students examine the issue of bias through selection or omission. Students compare media coverage of the H1N1 virus (or some other recent health issue) with media coverage of major global child health issues.

Hand out copies of *Student Handout: Global Child Health in the Media*, *Fact Sheet: Pneumonia*, *Fact Sheet: Diarrheal Diseases*, and *Fact Sheet: Malaria*. Review the assignment instructions for *Global Child Health in the Media*.

#### Discussion

On completion of the assignment discuss the following as a class:

- What gaps exist in the news coverage on global child health? Which stories do you think need more coverage?
- Share any interesting examples of bias you found in the news stories.
- Why don't global child health issues receive more media attention, given the numbers of children they affect?
- How would media coverage differ if 24,000 children were dying in Canada and the US each day?

#### Extension

Repeat this activity closer to the G8 meeting in Canada in June 2010. Compare findings with results from the original analysis to see if global child health issues gain more media attention.

## Activity 3 Filling the Gap Press Conference<sup>10</sup>

### Materials Needed

- Access to computers and the Internet

### Instructions

In this activity, students act as journalists to fill in the gap in media coverage of child health issues by staging a mock press conference. What story do they feel most needs to be told? How will they tell it so it gets heard?

*Step One:* Organize students into groups of three. Groups brainstorm and record story ideas. They can recall interesting topics from their Internet searches in Activities 1 and 2, or they may want to conduct more Internet research for ideas. The following websites are good sources for stories on health issues:

- World Vision Report: Radio Programs<sup>11</sup>
- World Vision International News Room<sup>12</sup>
- World Health Organization: Media Centre<sup>13</sup>
- UNICEF Press Centre<sup>14</sup>

*Step Two:* Once groups choose a topic, they are responsible for hosting a press conference to publicize the story and the issue. They will need to assign a group member to each of the following tasks:

1. Create a five minute, one-page script for the spokesperson delivering the information.
2. Create visuals to support the spokesperson's presentation, including a five frame PowerPoint slide show.
3. Create a one-page press release to be distributed in advance of the press conference.

Students can reference the media sites above for sources of style, language and voice in creating their press releases and press conference. Direct them to the following websites for tips:

- Media Awareness Network: Media Toolkit for Youth Tip Sheet, Writing a News Release, Making A Communications Plan and How to Hold a Media Event<sup>15</sup>

<sup>10</sup> Activity adapted from Baron, M., Beyond Media Messages: Media Portrayal of Global Development. Media Awareness Network. [http://www.media-awareness.ca/english/resources/educational/lessons/secondary/global\\_development/beyond\\_media.cfm](http://www.media-awareness.ca/english/resources/educational/lessons/secondary/global_development/beyond_media.cfm)

<sup>11</sup> World Vision Report: Radio Programs, <http://www.worldvisionreport.org/> (2009).

<sup>12</sup> World Vision International News Room, <http://www.wvi.org/wvi/wviweb.nsf/maindocs/226C8B2D88F716F688257387007E1BBF?opendocument> (2009).

<sup>13</sup> World Health Organization: Media Centre, <http://www.who.int/mediacentre/en/> (2009).

<sup>14</sup> UNICEF Press Centre, <http://www.unicef.org/media/index.html> (2009).

<sup>15</sup> Media Awareness Network. Media Literacy. [http://www.media-awareness.ca/english/tools/main\\_search/search\\_results.cfm](http://www.media-awareness.ca/english/tools/main_search/search_results.cfm) (2009)

# Module 2

- Amnesty International: How to Write a Press Release.<sup>16</sup>
- You Tube: Attawapiskat Press Conference in Ottawa.<sup>17</sup> An example of a press conference led by youth.

*Step Three:* Before conducting each press conference, hand out copies of the group's press release so students can compose questions to ask in their roles as reporters at the conference. Suggest question-starters that encourage development of critical thinking skills such as analysis, synthesis and evaluation.

*Examples:* What conclusions can you draw about...? Can you elaborate on...? In your opinion, what will be the result of...? How do you explain...?

## Extensions

- 1) Use the activities in this module to explore another current news topic.
- 2) Invite a journalist or news editor into the class to observe the press conferences. Ask the guest to talk about how editorial decisions are made and how to attract media attention for a neglected story or issue.

<sup>16</sup> Amnesty International, How to Write a Press Release,  
[http://www.amnesty.ca/youth/youth\\_action\\_toolkit/how\\_to\\_write\\_press\\_release.php](http://www.amnesty.ca/youth/youth_action_toolkit/how_to_write_press_release.php) (2009).

<sup>17</sup> YouTube, Attawapiskat Press Conference,  
<http://www.youtube.com/watch?v=dPAfgsKefDg> (2008).



## Student Handout

### Analyzing Media Messages

#### Assignment

Find three different media pieces on the same topic. Try to choose ones that include visual elements (photos, video) and that are from different regions of the world. The news search engines listed below will be useful, but feel free to try others.

<b>Google News</b>	<a href="http://news.google.com">http://news.google.com</a>
<b>Yahoo News</b>	<a href="http://news.yahoo.com">http://news.yahoo.com</a>
<b>AltaVista News</b>	<a href="http://news.altavista.com">http://news.altavista.com</a>

A good place to start is Google News. Perform a search for the topic and find an article where a number of other media are reporting on that same topic. This will be shown with a green link at the end of the article description (for example: “all 3,451 news articles”). After following this link, check to see if there are any related images and videos (see the right side of the screen). Following these links will help you find related television news programs and news articles with photos.

When you have your three media pieces, use this series of questions<sup>18</sup> to examine the source of each, its trustworthiness and relevancy. Answering these questions will lay the groundwork for determining bias in each piece. Record your answers.

- What is the message?
- Who is sending the message? Who paid for it?
- Who or what are the sources of the information?
- When and how was this message shared with the public?
- How credible or believable is this (and what makes me think that)?
- What is missing from this message that might be important to know?
- Who is the intended audience?
- Who might benefit from this news?
- Does this message matter to me?
- Can I respond to this message? How?

*Next step:* Use the *How to Detect Bias in the News* handout to determine if and how each media piece conveys bias. Make notes and be specific with your examples. Explain why you feel each example shows bias or a value judgment.

Be prepared to share your findings.

<sup>18</sup> Questions adapted from: Alliance for a Media Literate America, Key Questions to Ask When Analyzing Media Messages, and Media Awareness Network, Curriculum Outcomes: Atlantic Provinces: English Language Arts 7-9.

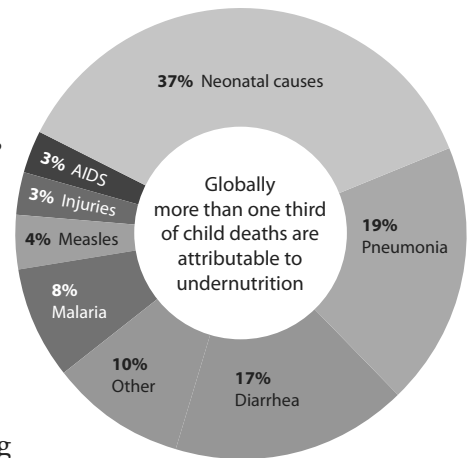
# Module 2

## Student Handout

### Global Child Health in the Media

Every day more than 24,000 children die of preventable causes (see Figure 1). Most of the treatments and preventions are easy and cost-effective. For example, a simple mixture of water, salt and sugar, or a single dose of a common vaccine, can mean the difference between life and death for many children who live and die in developing or lesser-developed nations.

Given the great numbers of children who die before reaching their fifth birthday, there's no question this is a big news story. But is this global health tragedy being reported in the media? And how does it compare to coverage of a hot topic like the H1N1 virus?



Child Info: Child Mortality,  
[http://www.childinfo.org/mortality\\_progress.html](http://www.childinfo.org/mortality_progress.html), Sept 2009.

### Assignment

(Note: If H1N1 is no longer relevant, choose another current health topic in the news.)

1. Go to Google News: [www.google.ca/news](http://www.google.ca/news)
2. Search recent health articles to determine the current worldwide death toll from the H1N1 virus. Also visit the World Health Organization at <http://www.who.int/csr/disease/swineflu/updates/en/index.html> for H1N1 situation updates.
3. The first recorded deaths due to H1N1 occurred in the last week of April 2009. Calculate the number of weeks between the last week of April 2009 and today's date. Divide the *current death toll from H1N1* by the *number of weeks* to get the *average number of deaths per week* (see example on pg. 25). Record this in your chart.
4. Enter the health issues from the Google Search column in the chart below into the search field. Choose 'Past Week' or "Past Month" from the list on the left. Note the number of articles that come up for each issue, and record in the chart.
5. Determine the ratio of the number of articles published per deaths for each of the four health issues. Divide the *total number of articles per week* by the *number of deaths per week* to get the *article per death ratio*.
6. Skim read a few of the articles you pulled up with your Google searches, looking for examples of bias (see handout *How to Detect Bias in the News*). Make notes on the types of bias in each article and answer the following questions:
  - i) Make observations about your Google News searches and calculations. What conclusions can you draw?
  - ii) Why are global child health issues not as widely and frequently covered as issues like H1N1?
  - iii) Which health issue do you think deserves more of your attention? Why?

# Module 2

## Health Issues in the Media Chart

\*Statistics from Child Mortality: Progress, Sept 2009.<sup>19</sup>

Google search	Number of Articles/Week	Number of Deaths / Week	Article / Death Rate
e.g. H1N1 Virus	125,000	100	$125,000 / 100 = 1,250$ articles / one death
H1N1			
Under Five Mortality		169,000	
Pneumonia + Child		32,000	
Diarrheal Disease + Child		28,700	
Malaria + Child		13,500	

<sup>19</sup> Childinfo. Child Mortality: Progress,  
[http://www.childinfo.org/mortality\\_progress.html](http://www.childinfo.org/mortality_progress.html), UNICEF, Sept 2009

# Module 3

## Module 3: The Power of Numbers

Mathematics, Social Studies



Numeracy



Written



Visual



Media

### Students will:

- Use mathematical data to problem solve about a global issue
- Represent and interpret data in various graph formats
- Interpret patterns and relationships using comparative analysis
- Calculate first differences and construct a line of best fit

### Module 3

- Activity 1: Exploring Infant and Child Mortality (50 mins)
- Activity 2: Comparing Mortality Rates (100 mins)
- Supplementary Materials: *Student Handouts: Infant Mortality in Canada and Reducing Child Mortality*; *Teacher Resource: Module 3 Answer Key* (p. 61)

*Note:* This module requires understanding of how to calculate averages and first differences, and how to construct bar, line and scatter graphs.

## Activity 1: Exploring Infant and Child Mortality

### Materials

- Calculators, rulers, pencil, paper, markers, chart or banner paper
- Class set of *Student Handout: Infant Mortality in Canada* (p. 30)

### Opening Challenge

Write the following statement on a piece of chart or banner paper and hang on the wall or board. Ask students to record their responses to this statement on the paper.

**8.8 million children  
under the age of five  
died in 2008**

#### Under-Five Mortality Rate (U5MR)

The under-five mortality rate is the probability of a child born in a specific year dying before the age of five, expressed as a number between zero (will not happen) and one (will always happen) per 1,000 live births. It is a leading indicator of the level of child health and overall development in countries.

Another commonly used indicator is the infant mortality rate, which is the number of infants one year of age or younger that die per 1000 live births.

The World Health Organization (WHO) defines a live birth as any birthed human being who demonstrates independent signs of life, including breathing, voluntary muscle movement, or a heartbeat.

# Module 3

*Discuss:* Imagine you saw this statistic on a billboard: would you stop and take notice? How do statistics help us understand an issue? What do statistics not tell us?

Students work in pairs to break down the above statistic and calculate how many children died in 2008 per day, hour, minute and second. They should reach the following answers:

## 8.8 million

children under the age of five died in 2008

= 24,109 /day

= 1,004 /hour

= 16.7 /minute

**= approx. 1 child every 4 seconds**

*Discuss:* Which of these statistics has the most impact for you? What else do you want to know?

*Extension:* Create a paper “billboard” that displays the statistic for child deaths in 2008 – and its break down – in a public area of the school. Do this to raise awareness for International Day of the Child (Nov 20) or World Health Day (April 7). Invite other students to write their responses to these statistics on the paper billboard.

### Instructions

Explain the concept of under-five mortality rate (U5MR) to students (see text box).

Give each student a copy of *Student*

*Handout: Infant Mortality in Canada.*

Review and complete the assignment,

referring to *Teacher*

*Resource: Module 3*

*Answer Key.*

#### The Health of Canadian Aboriginal Children

In Canada, wide disparities exist between the health of Aboriginal and non-Aboriginal children. Socio-economic, cultural and environmental factors contribute to these differences.

The health of Canadian Aboriginal populations is challenged by factors such as poverty, lower levels of education, and substandard housing. These factors result in higher infant mortality rates, under-nutrition, lower rates of immunization, and higher rates of obesity, diabetes and other chronic diseases. Geographic isolation and lack of access to healthcare make these problems difficult to address.

Although the infant mortality rates among Canadian Aboriginal populations have been decreasing, they are still three to seven times higher than national averages.

The Human Development Index (literacy rates, GDP, life expectancy) ranks Canada third in the world out of 177 countries. But when we factor in Canada's Aboriginal reserve populations, this ranking falls to 66th in the world.

Source: UNICEF, Aboriginal Children's Health: Leaving No Child Behind, <http://www.unicef.ca/portal/SmartDefault.aspx?at=2063> (2009).

# Module 3

## Discuss

When students have completed the assignment, discuss the following:

- What did you learn about infant mortality in Canada? Did anything surprise you?
- What observations can you make about infant mortality rates in regions where Aboriginal populations are high?
- Read the information in *The Health of Canadian Aboriginal Children* text box. Discuss student reactions to this information.
- What more would you like to know about this topic?

## Activity 2: Reducing Child Mortality

### Materials

- Calculators, rulers, pencils, paper
- Class set of *Student Handout: Reducing Child Mortality* (p. 32)
- Downloaded video: *Reducing Child Mortality*<sup>20</sup> (10:00)

### Opening Challenge

Ask students to calculate the minimum amount of money they need to live each day. Think about food, shelter, clothing, entertainment, transportation, etc. Share answers with the class and discuss differences.

Explain that more than one billion people live on less than \$1 per day.

*Discuss:* Could you live on this amount? Why or why not?

Connect the discussion to the Millennium Development Goals (MDGs) as an international response to improve the lives of people around the world. Use *Global Child Survival: An Overview* (p. 7) to review the MDGs.

### Copenhagen Consensus

Copenhagen Consensus is a think-tank based in Denmark that brings together top international economists every four years to reach consensus on the following idea:

*Imagine you had \$75 billion to donate to worthwhile causes. What would you do and where should we start?*

The economists deliver a ranked list of the most promising solutions to ten of the world's most pressing issues, such as malnutrition, climate change, terrorism and air pollution.

The conclusions are meant to inform governments and philanthropists around the world on the best way to spend aid and development money to achieve the most good for people and the planet.

Of the top five ranked solutions in Copenhagen Consensus 2008, four reduce child mortality rates through prevention of malnutrition and disease: micronutrient supplements, micronutrient fortification, expanded immunizations of children, and biofortification of food crops.

See the ranked outcomes of Copenhagen Consensus 2008:  
<http://www.copenhagenconsensus.com/Home.aspx>

<sup>20</sup> Gapminder, Reducing Child Mortality, <http://www.gapminder.org/videos/gapcasts/gapcast-11-reducing-child-mortality/> (2008).

# Module 3

## Instructions

Give students copies of *Student Handout: Reducing Child Mortality*. In this assignment they examine child mortality rates by creating a graph and drawing a line of first differences, then drawing conclusions about Millennium Development Goal 4: Reducing Child Mortality.

When students have completed their assignments, show the Gapminder video *Reducing Child Mortality*.

## Discuss

- What did you discover when you plotted your graph?
- Compare your findings to those in the Gapminder video.
- What variables affect the downward trend in child mortality? How might we speed up reductions in child mortality?
- Which areas of the world still struggle with reducing child mortality? Why is there such concern for these areas?
- Do you think we will achieve MDG 4 by 2015?

## Extension

1. Use the Gapminder World interactive tools at [Gapminder.org](http://Gapminder.org) to explore correlations between under-five mortality and other indicators like births attended by skilled health staff, maternal mortality, income growth, etc. The graphs show changes over time and geographical distribution is displayed on a world map. Use this tutorial<sup>21</sup> to explain how Gapminder World works.
2. Discuss the Copenhagen Consensus (see text box). What do you think of assigning quantitative values to variables like child deaths and quality of health? Debate the pros and cons of addressing global humanitarian problems through economic solutions.
3. Create a multi-media school display using: the student graphs created in this module; a demonstration of Gapminder tools and videos; and an interactive on-line survey to gather qualitative data on student understanding about issues of global child health and mortality (use SurveyMonkey).
4. Use statistics and mathematical principles to create short children's stories that convey data management concepts learned in this module. See Counting Stories<sup>22</sup>, an innovative math project for eliciting student understanding of mathematical concepts.

<sup>21</sup> Gapminder, Mind the Gap! Tutorial, <http://graphs.gapminder.org/world/downloads/instruction.pdf> (2009).

<sup>22</sup> Dalrymple, Shirley., Counting Stories, Math Performance Festival. <http://www.edu.uwo.ca/mpc/ShirleyDalrymple/index.html> (2009).

## Student Handout Infant Mortality in Canada

Canada's infant and under-five mortality rates are among the lowest in the world. However, there are regional differences in these rates.

**Table 1.** Infant Mortality Rate (IMR), by territory and province (per 1000 live births)

Region	2002	2003	2004	2005	2006	Average
Newfoundland and Labrador	4.5	5.0	5.1	6.2	5.3	
Prince Edward Island	1.5	4.9	4.3	2.2	2.1	
Nova Scotia	4.2	5.7	4.6	4.0	4.0	
New Brunswick	3.8	4.1	4.3	4.1	4.0	
Quebec	4.8	4.4	4.6	4.6	5.1	
Ontario	5.3	5.3	5.5	5.6	5.0	
Manitoba	7.1	8.0	7.0	6.6	6.0	
Saskatchewan	5.7	6.3	6.2	8.3	6.1	
Alberta	7.3	6.6	5.8	6.8	5.3	
British Columbia	4.6	4.2	4.3	4.5	4.1	
Yukon	8.8	6.0	11.0	0	8.2	
Northwest Territories	11.0	5.7	0	4.2	10.2	
Nunavut	11.0	19.8	16.1	10.0	13.4	

Source: Statistics Canada, Infant Mortality Rate, <http://www40.statcan.gc.ca/l01/cst01/health21a-eng.htm> (2006).

### Part I

Refer to *Table 1. Infant Mortality Rate (IMR), by territory and province.*

**Aboriginal:** a collective name for all original peoples of Canada and their descendants. Most Aboriginals identify as belonging to one of three main groups: First Nations, Métis and Inuit.

- Calculate the average infant mortality rate for each territory and province. Record on the chart.
- Represent the provincial and territorial averages in a bar graph.
- Label the x-axis *Provinces and Territories*, with intervals for each one. Label the y-axis *Average Infant Mortality Rate (per 1000 live births)*. Label appropriate scales on each axis and title the graph.
- Plot the data for each province or territory. Analyze the results and answer questions below.

### Analysis

1. Compare average infant mortality rates between the provinces and territories. Which are lowest and which are highest?
2. Why might some regions experience higher infant mortality rates? Consider geographical, social and economic reasons.



**Table 2.** Aboriginal Identity Population, by province and territory (2006 Census)

Region	Total Population	Aboriginal Identity Population	Percentage of Population that Identifies as Aboriginal
Newfoundland and Labrador	500,610	23,455	
Prince Edward Island	134,205	1,730	
Nova Scotia	903,090	24,175	
New Brunswick	719,650	17,650	
Quebec	7,435,905	108,425	
Ontario	12,028,895	242,495	
Manitoba	1,133,515	175,395	
Saskatchewan	953,850	141,890	
Alberta	3,256,355	188,365	
British Columbia	4,074,385	196,075	
Yukon	30,190	7,580	
Northwest Territories	41,060	20,635	
Nunavut	29,325	24,915	

Source: Statistics Canada, Aboriginal Identity Population, <http://www40.statcan.gc.ca/l01/cst01/demo60a-eng.htm> (2006).

## Part 2

Refer to *Table 2. Aboriginal Identity Population, by province and territory*.

- Calculate the percentage of the population that identifies as Aboriginal for each province and territory. Divide the Aboriginal Identity Population by the Total Population and multiply by 100. Record these values in the chart.
- Create a scatter plot graph with 2006 *Infant Mortality Rates* on the y-axis and *Percentage of the Population Identifying as Aboriginal* on the x-axis. Label appropriate scales on each axis and title the graph.
- Plot the data for each province or territory. Analyze the results and answer questions below.

## Analysis

1. What does your graph reveal about infant mortality rates in provinces and territories with large proportions of Aboriginal residents?
2. What geographical, social and economic reasons might contribute to these higher rates of infant mortality? What are the implications for Aboriginal child health?

# Module 3

## Student Handout Reducing Child Mortality

The Millennium Development Goals (MDGs) committed all countries around the world to eight goals for reducing poverty and improving the lives of all people by the year 2015. Millennium Development Goal 4 focuses on reducing child mortality by two-thirds of 1990 levels. Child mortality rates around the world have been dropping throughout the last 50 years. But are they dropping fast enough to reach MDG 4 by 2015?

### Assignment

Refer to *Table 1. Levels and trends in under-5 mortality (1990-2008)*.<sup>23</sup>

- Compute first differences for the 'Under-Five Deaths' column of Table 1. Record these values in the chart.
- Graph Table 1 as a line graph with *Year* along the x-axis and *Under-Five Deaths* along the y-axis. Compose the graph on paper or, if available, use Microsoft Excel, following the instructions below.
  - a) Enter the table information in the cells.
  - b) Highlight the columns and under 'insert' choose 'Scatter Chart.'
  - c) Click on the chart area.
  - d) Under 'Layout', then 'Gridlines,' add Major/Minor Grid lines for x-axis (horizontal) and y-axis (vertical).
  - e) Under 'Layout,' then 'Trendline,' select 'Linear Trendline.'
  - f) Choose 'More Trendline Options.' Under 'Forecast,' input 7.0 periods forward.
  - g) Under 'Layout,' enter a 'Chart Title' and the 'Axis Titles.'
- If Microsoft Excel is not available, draw a line of best fit using a ruler.

Table 1. Levels and trends in under-5 mortality (1990-2008)		
Year	World-wide Under-Five Deaths (in millions)	First Differences
1990	12.5	
1995	11.4	
2000	10.4	
2005	9.3	
2007	8.9	
2008	8.8	

The Lancet, 2009. [http://www.childinfo.org/files/Lancet2009\\_Comment.pdf](http://www.childinfo.org/files/Lancet2009_Comment.pdf)

<sup>23</sup> You D., T. Wardlaw, P. Salama, G. Jones,  
Levels and trends in under-5 mortality, 1990–2008, The Lancet, 2009.

# Module 3

## Analysis

1. Based on your calculations of first differences, is this a perfect linear relationship?
2. What relationship does your graph show between time period and under-five deaths?
3. Predict the number of under-five deaths in 2010 and 2015 based on the current rate of progress.
4. Millennium Development Goal 4 aims to see a two-thirds reduction in child mortality by 2015 from 1990 levels. Based on your graph, are we on track to meet that goal?
5. What factors might account for the steady decline in average world child mortality rates?

# Module 4

## Module 4: The Power of Words

Language Arts, Dramatic Arts



Oral



Written



Visual



Performance

### Students will:

- Employ elements of writing style and form appropriate to the purpose and audience
- Understand and apply technical aspects of writing poetry
- Use written and oral language conventions to enhance meaning and artistry
- Engage in active listening
- Create a critical and personal response to a global justice issue

### Module 4

- Activity 1: Poetry Warm Up (60-75 minutes)
- Activity 2: Vox Populi: Spoken Word Activity (150-200 minutes)
- Supplementary Materials: *Student Handouts: At First Glance, Abdula's Story, Tips for Writing and Performing Spoken Word Poetry* and *Student Evaluation Rubric: Spoken Word Performance*

## Activity 1: Poetry Prompts

### Materials

- Copies of *Student Handout: At First Glance* (p. 37). Detach photo captions and set aside.
- Downloaded MP3 of the World Vision Radio podcast *Fake Malaria Drugs*<sup>24</sup> (4:25).
- Class set of *Student Handout: Abdula's Story* (p. 38)

### Instructions

Each of the following are prompts for creating “found” poetry. This type of poetry uses words, phrases or even entire passages from other sources and reframes them as poems by changing metre, rhythm and layout (and thereby meaning), or by altering the text with additions and/or deletions.<sup>25</sup>

### Prompt 1

Listen to the podcast *Fake Malaria Drugs*. Students record descriptive words and phrases (e.g. “hole in the wall pharmacy”) that catch their attention. If needed, play the podcast more than once. Students use their lists of words and phrases to create a short poem.

<sup>24</sup> World Vision Radio, Fake Malaria Drugs, <http://www.worldvisionreport.org/Stories/Week-of-April-18-2009/Fake-Malaria-Drugs> (2009).

<sup>25</sup> Wikipedia, Found Poetry, [http://en.wikipedia.org/wiki/Found\\_poetry](http://en.wikipedia.org/wiki/Found_poetry)

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## Prompt 2

Provide one copy of *Student Handout: At First Glance*, with the caption removed, to students working in pairs. One student writes down a word or phrase that first comes to mind when looking at the photo. The second student writes a word or phrase below the partner's ideas. Continue this alternating pattern until all ideas are exhausted. Share the photo caption with students and instruct them to add any additional ideas generated to their lists of words and phrases. Pairs use the completed lists to compose a poem.

## Prompt 3

Students read *Student Handout: Abdula's Story* and highlight or underline points that grab their attention. Ask them to imagine Abdula's life: What would a typical day be like for him? What are his dreams and aspirations? What are his fears? Students brainstorm ideas and use them to write a poem in Abdula's or his mother's voice.

## Activity 2: Vox Populi: Spoken Word Activity

### Materials

- Pen, pencil, paper, word processor, recording device, microphone (optional)
- Class sets of: *Student Handout: Tips for Writing and Performing Spoken Word Poetry* (p. 39) and *Student Evaluation Rubric: Spoken Word Performance* (p. 41)

### Background

Spoken word involves one or more people performing a poem orally, using techniques such as voice, gesture, rhythm and pacing to enhance its meaning. Spoken word makes use of stage techniques and voice as instruments of expression, blending poetry and storytelling, music, multimedia, sound art and performance art.

There are no formal rules or structure in writing spoken word poetry—informal language and free verse are used for deliberate effect. Rules of grammar are not mandatory as long as the message is clear.

Spoken word poetry can be about any topic, but lends itself well to social justice and human rights issues. It can be a tool for advocacy, allowing people without a voice to be heard in a free and socially democratic forum. Spoken word is a contemporary *vox populi* art form made popular by the hip-hop influenced Def Poetry Jam,<sup>26</sup> poetry slams and spoken word festivals.

### Instructions

Before beginning, review and distribute *Student Handout: Vox Populi: Tips on Writing and Performing Spoken Word Poetry*, and the *Student Evaluation Rubric: Spoken Word Performance*.

#### Vox populi

This Latin phrase literally means “voice of the people.” The term is most often used in radio or television broadcasting when spontaneous public opinion is captured during “man on the street” interviews. It is also a dramatic technique used in theatre for revealing the inner thoughts of characters on stage.

<sup>26</sup> Wikipedia, Def Poetry, [http://en.wikipedia.org/wiki/Def\\_Poetry](http://en.wikipedia.org/wiki/Def_Poetry)

# Module 4

Students create a one or two minute spoken word poem expressing their views on an issue such as global child survival. Begin with research on related topics of interest (e.g. under-five mortality rates, malnutrition, deaths from preventable causes, malaria, access to health care and education, gender discrimination, or child labour). Visit [www.worldvision.ca](http://www.worldvision.ca) for more information, and refer to *Global Child Survival: An Overview* (p. 7), the *Fact Sheets* (pp. 51 - 56) and suggested *Further Resources* (p. 65).

After writing, editing and rehearsing their pieces, students can share their spoken word poetry with the class or perform it in a poetry slam for a broader audience to enjoy.

## Extension: Organize a Poetry Slam

In the late 1980s, Marc Kelly Smith, a Chicago poet and construction worker, introduced spoken word poetry slams,<sup>27</sup> competitive events where spoken word is used as a medium for social commentary. A poetry slam is an event where artists compete at the microphone and may be judged by the audience on their performances. Although some slams incorporate a competitive angle, the real point of the slam is to experience the poets and their words. For ideas on organizing a slam see *How to Plan a Spoken Word Contest*<sup>28</sup> or *Holding a poetry slam*<sup>29</sup> by Nancy Blalock.

<sup>27</sup> Wikipedia, Poetry Slam, [http://en.wikipedia.org/wiki/Poetry\\_slam](http://en.wikipedia.org/wiki/Poetry_slam).

<sup>28</sup> eHow, How to Plan a Spoken Word Concert, [http://www.ehow.com/how\\_2156772\\_plan-spoken-word-concert.html](http://www.ehow.com/how_2156772_plan-spoken-word-concert.html) (2009).

<sup>29</sup> Blalock, Nancy, Holding a poetry slam, University of North Carolina. <http://www.learnnc.org/lp/pages/655> (2009)

## Student Handout

### At First Glance



Photo used by permission from Steve Simon, Photosensitive.

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At first glance this is a photo of young boys playing soccer on a patch of dirt. But on closer look you will see the soccer match takes place near a graveyard — a graveyard where many victims of AIDS rest. Without a thought to the usual rituals associated with cemeteries, these friends play and laugh as the sun slowly sets behind them. Playing, laughing, friendships — these are important parts of growing up. Even amidst the death and devastation of AIDS, children will find ways to have fun.

Photo and caption reprinted from AIDS: PictureChange produced by The Canadian Coalition on HIV/AIDS and Youth in Africa, 2005.

# Student Handout

## Abdula's Story<sup>30</sup>

Five-year-old Abdula Kair Abraham's fragile body slowly recovers from the scourge of malnutrition. The swelling in his face, arms and legs brought on by the lack of food has now receded and left in its place dry, cracked skin that covers most of his body. At this point, at least most of his pain is gone.

Peculiarly, little Abdula is in relatively good spirits and even smiles as a health worker examines him. This is the second time in the last six months that he has been admitted to World Vision's Stabilization Centre, a small two-room operation in a health clinic that is part of the larger response to malnutrition in the town of Hirna, Ethiopia. "I was so scared he would die," recalls Fatuma Mohamed, Abdula's mother. "I was thinking since I could not make him better at home, maybe I wasn't feeding him right or taking care of him right and that's why it happened. I felt it was my fault."

Fatuma has been caring for Abdula and three other children on her own, ever since her husband died a year and a half ago. "There are times when we don't even have injera (local flat bread) to eat. I have nothing to feed my child," laments Fatuma as she rubs Abdula's hand. "I still don't have enough at home so when he's cured here I fear about what will happen when I take him home."

Families in this region of Ethiopia faced extreme hunger months ago when the main rainy season failed to come and most of them lost the bulk of their harvest. Since many families are subsistence farmers, when their harvests failed, they had nothing else to feed their children. It is estimated that across Ethiopia more than 4.2 million people are now in need of immediate food aid. Millions of those are children like Abdula.



Following reports of alarming rates of malnutrition a few months ago, World Vision set up the Community-Based Management of Acute Malnutrition (CMAM) programme. CMAM relies strongly on community support to reach children in need and focuses on children under the age of five who are at various stages of malnutrition. "It's possible to save a child from death, but the community has to be part of that solution," remarks Dereje Regass, World Vision's programme coordinator in Hirna. "We train the community so they can help in identifying, assessing and screening the children. They also help us by going door to door to tell other women about the programme."

In the initial stages, the challenges of setting up the programme were substantial. Eight of the treatment areas were set up in remote areas, with medication and supplies transported by staff on donkey back for hours through the highland mountains. Amongst the staff, no one doubts the need or complains about the workload. "Had this programme not been running, children would have died," Dereje continues. "There was no other option for those families."

Fatuma sits beside Abdula on one of the old hospital beds rubbing her child's hands, a mother's touch calming her sick child. "My priority is just to see him live through this."

*Marie Bettings, World Vision*

<sup>30</sup> Abdula's Story is adapted from: World Vision, CMAM programme treats hundreds of children in eastern Ethiopia, 5 Feb 2009.



# Student Handout

## Tips for Writing and Performing Spoken Word Poetry

### Getting Ready

Begin by researching a number of spoken word performances. Analyze the artists' use of language, pacing, rhythm, voice intonation, facial expression, and gesture. Memorize the work and imitate the style of an artist you admire.

Some places to start your research:

#### A) YouTube

- *A Single Rose*<sup>31</sup> by 12 year-old Mustafa Ahmed
- *Sudanese Children*<sup>32</sup> by Shannon Leigh
- *Never Let Me Down*<sup>33</sup> by J. Ivy
- *Speak With Conviction*<sup>34</sup> by Taylor Mali
- *What I Will*<sup>35</sup> by Suheir Hammad

B) bum rush the page: a def poetry jam. Medina, Tony and Louis Reyes Rivera, eds. Three Rivers Press. New York, 2001. (available at chapters.ca)

C) *SlamNation*<sup>36</sup> (1998) DVD and Education Guide (available in censored version for classroom)

D) *Russell Simmons Presents: Brave New Voices DVD series*.<sup>37</sup> This HBO series follows teenagers from 44 communities across the U.S. competing for a spot at the National Slam Poetry championship in Washington, D.C. Order the DVD series at the HBO Store.

E) Attend a local poetry slam. Check out the Calgary International Spoken Word Festival 2009,<sup>38</sup> Toronto Poetry Slam<sup>39</sup> and Canadian Festival of Spoken Word.<sup>40</sup>

### Writing Spoken Word Poetry

**Write without editing.** Write fast or slow, but don't pre-judge your ideas. Write from your own honest observations, experiences and thoughts. The point is to get something down on paper to edit and polish later. You don't have to write your thoughts in order; random lines or verses can be re-organized for coherence at the editing stage.

**Rewrite.** Few people write a masterpiece in one sitting, so edit and re-edit your work. Play with the flow and beat of the lines, use lots of concrete imagery (nouns, adjectives and active verbs), and choose the most precise words or phrases that make your meaning clear. Try to focus the poem on one specific topic. Set it aside for a day or two, then go back and read it with fresh eyes.

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<sup>31</sup> YouTube, A Single Rose, <http://www.youtube.com/watch?v=rbZksEZjRJg>

<sup>32</sup> YouTube, Sudanese Children, [http://www.youtube.com/watch?v=mSqWnP3B\\_r8](http://www.youtube.com/watch?v=mSqWnP3B_r8)

<sup>33</sup> YouTube, Never Let Me Down, <http://www.youtube.com/watch?v=le1kHp5lLmk>

<sup>34</sup> YouTube, Speak With Conviction, <http://www.youtube.com/watch?v=DmLE2bliXCI>

<sup>35</sup> YouTube, What I Will, <http://www.youtube.com/watch?v=LFbE8RBhSDw&NR=1>

<sup>36</sup> SlamNation.com, SlamNation Educational DVD, <http://www.slamnation.com/sales.html>

<sup>37</sup> HBO Store, Brave New Voices DVD Series, <http://store.hbo.com/detail.php?p=100209>

<sup>38</sup> Calgary Spoken Word Festival, <http://www.calgaryspokenwordfestival.com/>, 2009.

<sup>39</sup> Toronto Poetry Slam, <http://torontopoetryslam.com/>, 2009.

<sup>40</sup> Canadian Festival of Spoken Word, <http://cfs09.blogspot.com>, 2009.

# Student Handout

## Tips for Writing and Performing Spoken Word Poetry (cont'd)

**Read your poem out loud.** Get to know the feel of the words in your mouth and their sound in your ears. Commit them to memory. You'll be performing at some point, so become aware of both the strong and weak elements in your poem. Record your reading and listen critically to your voice in order to make changes or improvements. Refer to the *Student Evaluation Rubric: Spoken Word Performance* for guidelines.

**Read to a trusted friend or classmate.** Once you are satisfied with your poem, share it with someone whose opinion you trust. Ask for honest feedback on improving both the poem and your performance. Be receptive to suggestions, but remember it is your decision whether or not to make any changes.

### Performing Spoken Word Poetry

(See also *Student Evaluation Rubric: Spoken Word Performance*)

**Voice.** This is your most important and powerful performance tool and all you need to carry the poem off well. Work on pitch (high or low sound tone), intonation (the melody established by varying patterns of pitch), and pace (the speed of speech, which sets mood and tone). In pure spoken word performance, costumes, props and instruments are not allowed. While this may seem intimidating (or even boring) think of performers or speakers you admire whose voices alone mesmerize the audience.

**Body language, gesture and facial expression.** Use your body to convey the nuances of the poem. Enhance the words with facial expression, hand gestures<sup>41</sup> and movement, exuding confidence through your placement on stage and use of voice and/or microphone. Behaviours such as stuttering, shuffling, avoiding eye contact, nervous hand gestures, etc. are generally considered bad form, but are allowable if used deliberately for a specific effect.

**Memorization.** Reading from a paper is allowed...so is memorizing! Memorization allows you to make eye contact with the audience, pay attention to your delivery, and appear confident and prepared on stage.

**Audience awareness.** Be aware of your audience and speak to them. You are confiding your thoughts and asking them to relate. Think about Shakespeare's use of asides and soliloquies to draw the audience into a character's confidence.

**Technical elements.** This includes keeping within time limits, microphone use, and physical use of stage space (also called blocking).

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<sup>41</sup> Wikipedia, Types of Gestures,  
[http://en.wikipedia.org/wiki/Types\\_of\\_gestures](http://en.wikipedia.org/wiki/Types_of_gestures), 2009.

# Module 4

## Student Evaluation Rubric Spoken Word Performance

Criteria	Level 4	Level 3	Level 2	Level 1
<b>Voice</b>	<ul style="list-style-type: none"> <li>- Excellent use of voice qualities such as pitch, intonation and pacing</li> <li>- Voice projection is clear and audible</li> <li>- Fluent and coherent delivery</li> </ul>	<ul style="list-style-type: none"> <li>- Good use of pitch, intonation and pacing</li> <li>- Voice projection is mostly clear and audible</li> </ul>	<ul style="list-style-type: none"> <li>- Some use of pitch, intonation and pacing</li> <li>- Voice projection is sometimes clear and audible</li> </ul>	<ul style="list-style-type: none"> <li>- Little use of voice qualities to enhance performance</li> <li>- Voice is too quiet to be heard throughout performance space</li> <li>- Low level of clarity</li> </ul>
<b>Body Language</b>	<ul style="list-style-type: none"> <li>- Excellent use of facial expression, gesture and body language to enhance poem</li> <li>- Body language adds meaning</li> </ul>	<ul style="list-style-type: none"> <li>- Good use of facial expression, gesture and body language to enhance poem</li> </ul>	<ul style="list-style-type: none"> <li>- Some use of facial expression, gesture and body language to enhance poem</li> </ul>	<ul style="list-style-type: none"> <li>- Minimal use of body language to enhance poem</li> <li>- Meaning of poem depends on script alone</li> </ul>
<b>Audience Awareness</b>	<ul style="list-style-type: none"> <li>- Makes strong eye contact with audience</li> <li>- Consistently addresses the audience throughout</li> <li>- Audience is highly and visibly engaged</li> </ul>	<ul style="list-style-type: none"> <li>- Good use of eye contact</li> <li>- Addresses audience for most of the performance</li> <li>- Audience is engaged</li> </ul>	<ul style="list-style-type: none"> <li>- Some eye contact made</li> <li>- Addresses audience in some parts of performance</li> <li>- Audience is sometimes engaged</li> </ul>	<ul style="list-style-type: none"> <li>- No attempt to make eye contact with audience</li> <li>- Does not address audience</li> <li>- Audience is not engaged</li> </ul>
<b>Memorization</b>	<ul style="list-style-type: none"> <li>- Fully memorized without reliance on script</li> </ul>	<ul style="list-style-type: none"> <li>- Mostly memorized</li> <li>- Some reliance on script</li> </ul>	<ul style="list-style-type: none"> <li>- Some parts memorized</li> <li>- Mostly relies on script</li> </ul>	<ul style="list-style-type: none"> <li>- Not memorized</li> <li>- Reads completely from script</li> </ul>
<b>Technical Aspects</b>	<ul style="list-style-type: none"> <li>- Strong and conscious use of stage blocking</li> <li>- Performs within time limit or 10 second grace period</li> <li>- Very comfortable with microphone and uses it for effect</li> </ul>	<ul style="list-style-type: none"> <li>- Good use of stage blocking for effect</li> <li>- Within 20 seconds over time limit</li> <li>- Uses microphone appropriately</li> </ul>	<ul style="list-style-type: none"> <li>- Occasional use of stage blocking for effect</li> <li>- Within 30 seconds over time limit</li> <li>- Some proper use of microphone</li> </ul>	<ul style="list-style-type: none"> <li>- Stage blocking is weak (e.g. turns back to audience while speaking)</li> <li>- Exceeds both time and overtime limits</li> <li>- Improper or ineffective use of microphone</li> </ul>

### Notes:

# Module 5

## Module 5: Making Good on the MDGs

Communications Technology, Social Studies



Oral



Written



Media



Tech

### Students will:

- Identify theme, purpose and audience for media productions
- Use multimedia technology and appropriate conventions and techniques in creating a media production
- Work constructively in groups, using communication, problem-solving and organizational strategies to achieve a common goal
- Understand the significance of the Millennium Development Goals

### Module 5

- Opening Challenge (30 mins)
- Activity 1: The Millennium Development Goals Web Quest (50-100 mins)
- Activity 2: Podcasting for Progress (200 mins)
- Supplementary Materials: *Student Handouts: Web Quest* and *Podcasting for Progress*; *Global Child Survival: An Overview*; *Student Evaluation Rubric: Video Podcast*

*Note:* This module requires prior student knowledge of video recording devices, video editing software and uploading procedures.

### Materials

- Copies of *Student Handout: Web Quest* (p. 45) and *Global Child Survival: An Overview* (p. 7)
- Access to computers and the Internet
- Downloaded video: *GOOD: The Millennium Declaration*<sup>42</sup> (3:15)
- Sticky notes, markers

## Activity 1: Millennium Development Goals Web Quest

### Opening Challenge

You are working with a group of youth on an international campaign to eradicate extreme poverty around the world. List five to 10 priority areas the campaign should focus on (e.g. eliminate world hunger). Write each idea on a separate sticky note.

#### United Nations (UN)

An international organization made up of 192 member states and founded in 1945. Its aim is to facilitate cooperation in law, economics, human rights and social progress between nations, and to end conflict and promote world peace.

<sup>42</sup> YouTube, GOOD: The Millennium Declaration, <http://www.youtube.com/watch?v=vddX4n30sXY> (2009).

Place sticky notes from all groups on the board or chart paper. Examine the ideas and determine broad categories or themes that emerge. Group sticky notes with similar ideas into the categories.

*Option:* Students can use online software such as Bitstrips for Schools <sup>43</sup> or ToonDoo <sup>44</sup> to create comic strips for promoting their campaign ideas.

Introduce students to the Millennium Development Goals using *Global Child Survival: An Overview* and the video *GOOD: The Millennium Declaration*. Compare students' campaign priorities with the MDGs.

*Discuss:* What similar ideas exist between your campaign priorities and the MDGs? What ideas are missing from the class campaign priorities? From the MDGs?

## Instructions

In this assignment students conduct a web quest to learn more about the Millennium Development Goals and how they support global child health. Hand out copies of *Student Handout: Web Quest and Global Child Survival: An Overview* to students. Students read the overview and complete the web quest, either individually or in pairs.

## Discuss

When students have completed their web quests, facilitate the sharing of information with one of the following techniques.

1. *Expert Hotseat:* One student "expert" sits in the centre of a circle formed by the rest of the class who ask the expert questions from the web quest assignment or ones of their own making. The "expert" can be replaced by anyone who challenges the answer, or has more information to share on the topic.
2. *Jigsaw Groupings:* Number students from one to four. Organize students into home groups composed of the same number (i.e. all ones in a group, all twos, etc.) Assign each home group a few questions from the web quest. Groups discuss the assigned questions then reorganize into new groups composed of experts from groups 1 through 4. Each expert shares information from the home group discussions with the newly formed groups.
3. *On the Spot Response:* Divide students into equal groups. Members count off, beginning at number one, until each group member has a number. Randomly call out the number of a question from the web quest assignment. Each group has 30 seconds to huddle and decide on one response. Call out a group member number. All students assigned that number stand up. Choose one or two to answer the question. Keep the questions, huddle time and response time rapid, and give positive validation to the answers.

<sup>43</sup> Bitstrips For Schools,  
<http://bitstripsforschools.com/tour/> (2009).

<sup>44</sup> ToonDoo and ToonDooSpaces,  
<http://www.toondooSpaces.com/> (2009).

## Activity 2: Podcasting for Progress

### Materials

- Class set of *Student Handout: Podcasting for Progress* (p. 46), *Student Evaluation Rubric: Video Podcast* (p. 47).
- Download and copy class sets of Media Awareness Network handouts: *What is a Video Podcast?*<sup>45</sup> and *Camera Shots*<sup>46</sup>.
- Videocameras (or other recording devices, such as cellphones), microphones, lights, tripods, computer editing software (optional)

### Instructions

*Discuss:* What is a video podcast? What devices can be used to watch them? Which podcasts are your favourites and why has podcasting become so popular? Listen to radio podcasts on World Vision Report<sup>47</sup> or see video/audio podcasts at UNICEF:Vodcast<sup>48</sup>

#### Video Podcast

A video file distributed over the Internet for playback on mobile devices and personal computers. It can be created on a cell phone, a video camera, a webcam, or any device that records video. The process can be simple or complex, edited or unedited, with soundtrack or without. Source: Media Awareness Network

Organize students into groups of three or four. Handout copies of *Student Handout: Podcasting for Progress Assignment* and *Student Evaluation Rubric: Video Podcast*. In this assignment students represent a not-for-profit organization with a mandate to improve global child health and well-being. The organization is creating a podcast to garner media and public attention on the issue of child health and the MDGs. Review the assignment requirements. Groups brainstorm a name and specific mandate for their organization.

Handout copies of Media Awareness Network resources *What is a Video Podcast?* and *Camera Shots*. Use one or more of the facilitation strategies from Activity 1 (p. 43) to review information on pre-production, production and post-production, camera techniques and storyboards. Ensure students understand technical elements before creating storyboards and podcasts.

When the podcasts are complete, share them with the class. Groups can devise one or two discussion questions to engage the audience after viewing each video. Podcasts can be evaluated using *Student Evaluation Rubric: Video Podcast*.

### Extensions (also see *Taking Action: Youth-Led Initiatives*, p. 48)

1. Post video podcasts to websites or blogs, or enter them in online contests.
2. Send podcasts to politicians or relevant organizations.
3. Host a screening for other classes, families or community members.
4. Send your best video podcasts to [global\\_ed@worldvision.ca](mailto:global_ed@worldvision.ca) for possible online publication.

<sup>45</sup> Media Awareness Network, Student Tool Kit Handout: What is a Video Podcast? [http://www.media-awareness.ca/english/resources/educational/handouts/global\\_development/democratic\\_citizenship.cfm](http://www.media-awareness.ca/english/resources/educational/handouts/global_development/democratic_citizenship.cfm) (2009).

<sup>46</sup> Media Awareness Network, Student Tool Kit Handout: Camera Shots. [http://www.media-awareness.ca/english/resources/educational/handouts/global\\_development/democratic\\_citizenship\\_h2.cfm](http://www.media-awareness.ca/english/resources/educational/handouts/global_development/democratic_citizenship_h2.cfm) (2009).

<sup>47</sup> World Vision Report. <http://www.worldvisionreport.org/> (2009).

<sup>48</sup> UNICEF:Video/Audio. [http://www.unicef.org/videoaudio/video\\_vodcast.html](http://www.unicef.org/videoaudio/video_vodcast.html) (2009).

# Student Handout

## Web Quest

**Instructions:** Write a personal response to the Opening Question. Then answer the Web Quest Questions, consulting the suggested online resources, as well as other ones. Remember to paraphrase the information you find and keep a bibliography of all sites you use.

**Opening Question:** More than one billion people survive on less than one dollar per day. Could you? Why or why not?

### Web Quest Questions

- 1) Briefly describe the Millennium Development Goals and list the target for each goal.
- 2) Are we on track to achieve MDG 4? Why or why not? Which other MDGs must be achieved in order to reach MDG 4?
- 3) “Under-five mortality is a critical indicator of overall child health.” Explain.



**Online Resource 1** - Website: *UN Cyberschoolbus: The Millennium Development Goals*

<http://cyberschoolbus.un.org/mdgs/index.asp>



**Online Resource 2** - Document: *End Poverty 2015: Goal 4*

<http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom/Goal%204%20FINAL.pdf>



**Online Resource 3** - Video: *UN Millennium Campaign: Goal 4 – Child Health* (5:01)

<http://www.youtube.com/watch?v=TJjQW4f8EJo&feature=Playlist&p=F3CADB5A71355A4D&index=6>

- 4) “Child health depends on maternal health.” Agree or disagree and support your opinion.
- 5) Why is the Gapcast video called *Bangladesh Miracle*? What caused this miracle to happen?
- 6) If under-five mortality rates are dropping in countries like Bangladesh, should we still be concerned about MDGs 4 and 5? Explain.



**Online Resource 4** - Video: *UN Millennium Campaign: Goal 5 – Maternal Health* (5:01)

<http://www.youtube.com/watch?v=76W3AdjTTRo&feature=Playlist&p=F3CADB5A71355A4D&index=9>



**Online Resource 5** - Video: *Bangladesh Miracle* (5:32)

<http://www.gapminder.org/videos/gapcasts/gapcast-5-bangladesh-miracle/>



**Online Resource 6** - Video: *Reducing Child Mortality* (10:00)

<http://www.gapminder.org/videos/gapcasts/gapcast-11-reducing-child-mortality/>

- 7) What is the G8? Which countries take part?
- 8) What happens at the G8 Summit each year? Where is it being held next?
- 9) What is the difference between the G8 and the G20?
- 10) How would you convince G8/G20 leaders to make global child health a priority?



**Online Resource 7** - Website: *How the G8 Works*

<http://g8.gc.ca/about/how-the-g8-works/>



**Online Resource 8** - Website: *World Vision: Five For 5*

<http://www.worldvisionmedia.ca/fiveforfive/>



**Online Resource 9** - Video: *UNICEF: The J8 meets the G8*

<http://www.youtube.com/watch?v=WBH6smFYzhI&NR=1>



**Online Resource 10** - Video: *Huntsville G8 Summit*

<http://www.youtube.com/watch?v=T7-l2oo9ymg>

# Student Handout

## Podcasting for Progress

Assignment due date: \_\_\_\_\_

You and your peers work for a Canadian Non-Governmental Organization (NGO) focused on improving global child health and well-being. Your organization fully supports the Millennium Development Goals and is working hard to see that Goal 4: Reduce Child Mortality and Goal 5: Improve Maternal Health are achieved by 2015.

In June 2010 the world will watch as country leaders from the eight most powerful nations meet in Canada for the G8 Summit. Your organization wants to put global child health and the MDGs on the agenda at that Summit. To do this you need to gain media and public attention. Your group is being challenged to create a video podcast that draws attention to the issues and also suggests progressive solutions.

Your audience is your peers, the general public and world leaders. Choose a tone and style appropriate to the topic and message.

### Guidelines:

1. Podcasts should be three to five minutes in length.
2. All content in your podcast must be appropriate and teacher-approved before production.
3. Each group member must play an active role in the planning and production of the podcast.
4. To create a successful podcast, follow the steps and techniques in *What is a Video Podcast?* and *Camera Shots*.
5. Read the *Student Evaluation Rubric: Video Podcast* for evaluation guidelines.
6. Have fun!

After your podcast is completed and handed it in for evaluation, detach and fill in the Peer Evaluation Postcard below. Submit your postcards individually to your teacher.

Peer Evaluation Postcard		Name: _____
<b>Instructions:</b> <ul style="list-style-type: none"><li>• Put your name on this card. Give it to your group members to fill in.</li><li>• Each group member fills in constructive comments below. (Use reverse side for more space.)</li><li>• Read your comments to understand what you did well and where you might improve.</li><li>• Submit this postcard to your teacher.</li></ul>		
You contributed best to the project when you...		
Your most helpful ideas were...		
Some contributions you might make in future are...		



# Student Evaluation Rubric

## Video Podcast

Criteria	Level 4	Level 3	Level 2	Level 1
<b>Content</b>	<ul style="list-style-type: none"> <li>- Podcast demonstrates a thorough and complex understanding of the topic</li> <li>- Information presented is accurate and current</li> <li>- A wide variety of sources used</li> </ul>	<ul style="list-style-type: none"> <li>- Podcast demonstrates a good understanding of the topic</li> <li>- Most of the information is accurate and current</li> <li>- A variety of sources used</li> </ul>	<ul style="list-style-type: none"> <li>- Podcast demonstrates some understanding of the topic</li> <li>- Some of the information is accurate and current</li> <li>- Some good sources were used</li> </ul>	<ul style="list-style-type: none"> <li>- Podcast demonstrates little understanding of the topic</li> <li>- Information is often inaccurate and/or outdated</li> <li>- Few good sources were used</li> </ul>
<b>Creativity</b>	<ul style="list-style-type: none"> <li>- Script, storyboard, tone and style of the podcast exhibit creativity, originality and innovation</li> </ul>	<ul style="list-style-type: none"> <li>- Creative elements enhance the podcast</li> </ul>	<ul style="list-style-type: none"> <li>- Some creative elements enhance the podcast</li> </ul>	<ul style="list-style-type: none"> <li>- The podcast lacks creativity</li> </ul>
<b>Technical Production</b>	<ul style="list-style-type: none"> <li>- Strong use and understanding of techniques and procedures for creating/editing video productions</li> <li>- Transitions between clips/photos are always smooth</li> </ul>	<ul style="list-style-type: none"> <li>- Good use and understanding of techniques and procedures for creating/editing video productions</li> <li>- Most transitions are smooth</li> </ul>	<ul style="list-style-type: none"> <li>- Some use and understanding of techniques and procedures for creating/editing video productions</li> <li>- Some transitions are smooth</li> </ul>	<ul style="list-style-type: none"> <li>- Little use or understanding of techniques and procedures used for creating/editing video productions</li> <li>- Transitions are poorly edited</li> </ul>
<b>Camera Techniques</b>	<ul style="list-style-type: none"> <li>- Shots are clearly focused and well framed</li> <li>- Camera distance, angle and movement are always used effectively</li> </ul>	<ul style="list-style-type: none"> <li>- Most shots are clearly focused and well framed</li> <li>- Camera distance, angle and movement are used to good effect</li> </ul>	<ul style="list-style-type: none"> <li>- Some shots are clearly focused and well framed</li> <li>- Camera distance, angle and movement are sometimes effective</li> </ul>	<ul style="list-style-type: none"> <li>- Many shots are unfocused and poorly framed</li> <li>- Camera techniques are ineffective</li> </ul>
<b>Enhancements</b>	<ul style="list-style-type: none"> <li>- Soundtrack enhances mood, quality and understanding of content</li> <li>- Use of graphics adds significantly to the effectiveness of the podcast</li> </ul>	<ul style="list-style-type: none"> <li>- Soundtrack often enhances the podcast</li> <li>- Additional graphics enhance the podcast</li> </ul>	<ul style="list-style-type: none"> <li>- Soundtrack sometimes enhances the podcast</li> <li>- Few effective graphics are used</li> </ul>	<ul style="list-style-type: none"> <li>- Soundtrack detracts from the effectiveness of the podcast</li> <li>- Graphics are not well used or not used at all</li> </ul>
<b>Overall Level</b>				

## Notes:

# Taking Action

## Youth-Led Initiatives

*We are not the sources of our problems; we are the resources that are needed to solve them. We are not expenses; we are investments. We are not just young people; we are people and citizens of this world...and despite our different backgrounds, we share a common reality. We are united by our struggle to make the world a better place for all.*

— Children's Forum delegates address the United Nations Special Session on Children, May 2002

Students extend their learning through constructive action, developing the skills and attitudes needed to become informed global citizens. As the world becomes more interconnected, local and global citizenship skills are critical for both academic and career success. In *In the Global Classroom*, Graham Pike and David Selby say: "Student-directed action, around issues that are relevant to their lives and their community, provides an important grounding in the practice of responsible citizenship."<sup>49</sup>

Educators can help young people identify the issues they are passionate about and support them in meaningful actions. To support youth action in your classrooms encourage students to:

1. Reflect on things they want to change or improve
2. Identify their interests and passions
3. Conduct research to become informed about issues
4. Determine personal goals and objectives
5. Establish a project plan and timeline
6. Identify and access resources and support
7. Challenge and motivate others to participate
8. Execute their plan
9. Evaluate their efforts
10. Communicate their results

### Youth Leadership Challenge

2010 is a year for action. Young people can take a stand on reducing child mortality rates by telling the Canadian government that child health needs to be at the top of the G8 Summit agenda when world leaders meet in Ontario in June 2010.

Visit: <http://cli.gs/worldvisionleadershipchallenge>

## Resources for Youth-Led Action Plans

### Taking It Global Guide to Action: Simple Steps Towards Change<sup>50</sup>

Take students through the process of visualizing, initiating, executing and evaluating an action project.

### Only With Your Voice: Millennium Development Goals Youth Action Guide<sup>51</sup>

The Millennium Campaign informs, inspires and encourages the involvement of young people in the realization of the MDGs. This guide discusses what needs to be done to reach the goals, how youth are specifically affected and what they can do to raise awareness.

### Youth Action Zone<sup>52</sup>

World Vision Canada offers youth programs such as Youth Empowered conferences, Youth Leadership Retreats and Youth Ambassadors, as well as campaign actions and other opportunities for developing global citizenship skills.

<sup>49</sup> Pike, G. and D. Selby. In the Global Classroom 2. Pippin Publishing Corporation, Toronto (2000).

<sup>50</sup> Taking It Global, Taking It Global Guide to Action: Simple Steps Towards Change, <http://www.tigweb.org/action/guide/> (2009).

<sup>51</sup> Millennium Campaign, Millennium Development Goals: Youth Action Guide, [http://tig.phpwebhosting.com/themes/mdg/action\\_guide\\_en.pdf](http://tig.phpwebhosting.com/themes/mdg/action_guide_en.pdf)

<sup>52</sup> World Vision Canada: Youth Action Zone, <http://www.worldvision.ca/youth>

## Action Ideas to Get Started

- Showcase student work from *Alive at Five* modules in a public space.
- Organize a school assembly or open forum debate.
- Write children's stories about child health and host readings at local schools and libraries.
- Host a school or community dinner and educate about the causes and effects of malnutrition on children.
- Fundraise for a child health-focused organization or project. Educate donors on how funds are used.
- Start an online petition or join a campaign working to put global child health and survival on the G8 agenda.
- Create a website or blog at youth action websites, start a school group or educational radio show.
- Research Canada's commitments to global child health. Invite a local politician to speak about Canada's priorities in a Q and A session.



## Fact Sheets

**Fact Sheet 1:** Maternal and Newborn Health

**Fact Sheet 2:** Pneumonia

**Fact Sheet 3:** Diarrheal Diseases

**Fact Sheet 4:** Sanitation and Disease

**Fact Sheet 5:** Malaria

**Fact Sheet 6:** Malnutrition

**Survive to Five:** Module 1 Role Play Cards

**Teacher Resource:** Module 3 Answer Key

**Glossary of Technical Terms**

**Further Resources**

# Fact Sheet 1

## Maternal and Newborn Health

*Five years is not a child's lifetime in Canada and yet for millions around the world, it's the only shot at life they get. It's unacceptable when we have the know-how and the resources to change that reality.*

— Dave Toycen, President, World Vision Canada

- **The earliest days are the most vulnerable.** Almost 40% of under-five child deaths in the world occur in the first 28 days of life (the neonatal period).
- **Most neonatal deaths are preventable.** The majority of newborn deaths are caused by severe infections, asphyxia (oxygen deficiency) and premature birth.<sup>53</sup> Most of these deaths can be prevented by: access to prenatal care, birth attendants and emergency care; improved nutrition, screening and immunizations for pregnant mothers, and better access to clean water and sanitation.
- **The link between maternal and newborn health.** The health of a child is first influenced in the womb. It is estimated that 15% of all newborns are born underweight, an underlying factor in 60 to 80% of all newborn deaths. There is a strong connection between maternal undernutrition and low birth weight.<sup>54</sup>
- **Poverty is a factor.** 99% of maternal deaths due to pregnancy or childbirth complications, and under-five child deaths, occur in low- and middle-income countries, particularly sub-Saharan Africa and South Asia. Poverty increases the rate of infections, reduces access to healthcare and results in malnutrition.<sup>55</sup>
- **Low cost solutions.** Cost-effective interventions can improve maternal and newborn survival rates. These include: prenatal care to screen for infections; monitoring the health of the fetus and providing nutritional support; skilled birthing attendants; emergency obstetric and newborn care; good nutrition for newborns and nursing mothers; and post-natal (after birth) care for mother and baby.

### Model Mother, Healthy Child

With three young healthy children, 27-year-old Mrs. Kham reflects on how her life in Phonthong Village, Laos has changed in just a few years. Her first three pregnancies ended tragically: one miscarriage and the deaths of two infants within days of birth.

Health services and health education in her community did not exist, leaving Mrs. Kham to cope with her losses alone. Now, with the services and health education provided through World Vision's Pakkading Mother and Child Health Project, she is able to raise a healthy family with the certainty that her children have a promising future.

Working alongside the Pakkading District Government, World Vision provided financial support and training to district health workers. District health clinics were made more accessible by setting up drop-in hours for pregnant women and mothers. The infant mortality rate in Phonthong dropped from 14 to 15 infant deaths per year, to one or two infant deaths per year.

Mrs. Kham has also benefited from the "Model Mothers" program. Model Mothers are women volunteers who participate in training on basic healthcare, hygiene, nutrition, and pre/post-natal care. Upon completing the training, these women return to their communities to share their knowledge.

### Research, Think, Debate

Research: The rate of premature births in North America compared to African countries, and the link to reproductive technologies.

Think: If you were unable to have children, would you turn to assisted reproduction techniques? Why or why not?

Debate: The benefits of North American reproductive technologies do/ do not outweigh the resulting increases in preterm births.

### Additional Resources

Video: *WHO: Great Expectations* (6:40) [http://www.who.int/features/great\\_expectations/en/index.html](http://www.who.int/features/great_expectations/en/index.html)

Audio: *World Vision Report: Midwife in Malawi* (8:29) <http://www.worldvisionreport.org/Stories/Week-of-March-14-2009/Midwife-in-Malawi>

Document: *The State of the World's Children 2009-Youth Report* [http://youth.unicefusa.org/assets/pdf/0027-unicef-youthreport09-8\\_4.pdf](http://youth.unicefusa.org/assets/pdf/0027-unicef-youthreport09-8_4.pdf)

<sup>53</sup> Landers, C. *State of the World's Children Youth Report 2009: Maternal and Newborn Health*, [http://youth.unicefusa.org/assets/pdf/0027-unicef-youthreport09-8\\_4.pdf](http://youth.unicefusa.org/assets/pdf/0027-unicef-youthreport09-8_4.pdf) (2009).

<sup>54</sup> UNICEF, *State of the World's Children 2009*, <http://www.unicef.org/sowc09/> (2009).

<sup>55</sup> Phumaphi, J., *Poverty and Health: Children held hostage. Working towards equity in child survival*, World Health Organization (2006).

## Fact Sheet 2

### Pneumonia

*Pneumonia kills more children than any other illness -- more than AIDS, malaria and measles combined..*

— from *Pneumonia: The Forgotten Killer of Children*, World Health Organization and UNICEF

- **Pneumonia is the leading cause of death in children.** An estimated 1.8 million children under the age of five die each year from this acute respiratory infection (see text box). 40% of these deaths are in Africa.<sup>56</sup>
- **Poverty is a factor.** More than 95% of all new pneumonia infections each year occur in children under the age of five living in developing countries.<sup>57</sup>
- **Children with weak immune systems are at greatest risk.** Infants and children who are malnourished or suffering from other illnesses, such as AIDS or measles, are more likely to develop pneumonia.<sup>58</sup>
- **Pneumonia can be prevented.** Immunization, good nutrition and addressing environmental factors – overcrowded living conditions or poor air quality from indoor cooking fires – can decrease the chances of contracting the disease. A pneumonia vaccine for children is available, but at \$50 US per dose it is out of reach for most people in the developing world.
- **Most cases of pneumonia are treatable.** Antibiotics can be used in the most severe cases, which are often due to bacterial pathogens. However, a high level of resistance to antibiotic treatment is a problem in many parts of the world.
- **Early diagnosis is critical.** Pneumonia is treatable only if caught in time. Even though it is the number one killer of children in the developing world, only one in five parents know the tell-tale symptoms of pneumonia, such as fast or difficult breathing. Educating parents to recognize the early symptoms ensures children receive prompt medical care.<sup>59</sup>

#### Afghanistan: Immunization and Education

Twelve years ago, Ghulam Sahee Mohammadi's eight-month-old daughter fell ill with pneumonia. The ruling Taliban would not let a male pediatric specialist examine her, because she was a girl. She died soon after.

Mohammadi works as a vaccinator in the city of Karokh, in Herat province. "I was the first to work in immunization in Karokh. That was even before the Taliban," he recalls. "When we started, there was no electricity here. No radio. No newspapers. No education. We had only a small broken fridge, and almost no stock of medicines."

The desperate situation of women and children in Afghanistan is ranked among the worst in the world: worst infant mortality; second worst maternal mortality; third worst child mortality; and fifth worst neonatal mortality.

World Vision's Better Health for Afghan Mothers and Children (BHAMC) project in Herat Province helps community-based health workers deliver "timed counseling" messages for mothers at each stage of the birth-cycle, from birth preparedness to infant feeding and immunization.

"We talk about the benefits of vaccinations with the women," says Mohammadi's daughter Paristu, also a vaccinator. "The good results they'll see for their child's future. I hope in 20 years we will have succeeded in increasing the immunization level of women and children in the community. Eradicating diseases like tetanus, diphtheria, polio, TB, measles, hepatitis, and influenza."

#### Research, Think, Debate

Research: The controversies surrounding the safety and ethics of widespread immunization programs.

Think: Do you get the yearly flu vaccine? Are you in favour of widespread use of vaccines?

Debate: Pneumococcal vaccination is available, but not part of routine immunization programs for Canadian children. Should it be?

#### Additional Resources

Video: *Antibiotics and Pneumonia in Honduras* (3:58) [http://www.pbs.org/wgbh/rxforsurvival/series/video/d\\_pne2\\_dis\\_pneu1\\_rm\\_h.html](http://www.pbs.org/wgbh/rxforsurvival/series/video/d_pne2_dis_pneu1_rm_h.html)

Website: *World Health Organization: Pneumonia* <http://www.who.int/mediacentre/factsheets/fs331/en/index.html>

Document: *Pneumonia: The Forgotten Killer of Children* [http://whqlibdoc.who.int/publications/2006/9280640489\\_eng.pdf](http://whqlibdoc.who.int/publications/2006/9280640489_eng.pdf)

<sup>56</sup> PBS, *Deadly Diseases: Pneumonia*, <http://www.pbs.org/wgbh/rxforsurvival/series/diseases/pneumonia.html> (Mar 2006).

<sup>57</sup> UNICEF, *Childinfo: Pneumonia*, <http://www.childinfo.org/pneumonia.html> (Jan 2009).

<sup>58</sup> UNICEF, *Pneumonia: The Forgotten Killer of Children*, [http://whqlibdoc.who.int/publications/2006/9280640489\\_eng.pdf](http://whqlibdoc.who.int/publications/2006/9280640489_eng.pdf) (2006).

<sup>59</sup> PBS, *ibid*.

## Fact Sheet 3

### Diarrheal Diseases

*Diarrhea is the world's most effective weapon of mass destruction.*

—Rose George, journalist and author of *The Big Necessity: The Unmentionable World of Human Waste and Why it Matters*

- **Diarrheal diseases are the second leading cause of death after pneumonia.**

Diarrheal diseases caused by pathogens such as rotavirus, cholera, e. coli and salmonella result in an estimated 1.7 million child deaths every year, making diarrheal diseases the second largest killer of children under five.<sup>60</sup>

- **Deaths from diarrhea disproportionately target the poor.** Children in developing countries are most at risk of diarrheal disease because of malnourishment, lack of access to clean water, poor environmental sanitation, limited parental education and poor health care. Children who survive persistent diarrhea suffer from stunted growth and learning difficulties.<sup>61</sup>

- **Dehydration can be deadly.** Drinking water or food contaminated by fecal matter or disease-causing bacteria, viruses or parasites, contains microscopic organisms that multiply in the intestines and release toxins that cause vomiting and diarrhea. Left untreated, the resulting loss of water and electrolyte minerals such as sodium, potassium and chloride, can lead to severe dehydration and death.

- **An effective treatment for diarrheal diseases.** Considered one of the most important public health breakthroughs of the 20th century, oral rehydration therapy (ORT) has saved the lives of millions of children. This simple solution of common household ingredients – salt, sugar and water – maintains hydration levels and prevents death.<sup>62</sup> ORT has saved an estimated 50 million lives at a cost of less than US\$0.30 per treatment.<sup>63</sup>

- **Child deaths due to diarrhea are preventable.** Improved access to safe water and proper sanitation, good hygiene practices such as hand washing, educating mothers on the benefits of breastfeeding for infant health, oral rehydration therapy, distributing zinc (a necessary micronutrient) and Vitamin A supplements, and providing vaccines against rotaviruses, are all ways to stop child deaths from diarrheal diseases.

#### Singing a Public Health Message

In Singida, Tanzania, children in school health clubs at Kisaki Primary School have fun learning about sanitation through songs, games and drama.

Cholera and diarrheal diseases can mean days of missed school for sick children, School health clubs provide a way for children to educate their families and communities about good sanitation practices. A simple change in behaviour – washing hands with soap and water – can reduce diarrheal diseases by 40%.

Simple songs such as this are saving lives:

We can prevent diseases like cholera, bilharzia, and diarrhea.  
We have to get rid of them completely and wipe them out.  
We should not walk barefoot by water.  
We should boil water before drinking it.  
We should wash our hands after going to the latrine and before eating.  
Don't wash at the waterpoint.  
We can get rid of diarrhea.

Listen to the song at WaterAid, International site.

#### Research, Think, Debate

Research: Find interesting examples of public health campaigns.

Think: In what ways does having access to public health education improve health?

Debate: Public health education is/is not the most important solution in fighting diarrheal disease.

#### Additional Resources

Video: *Oral Rehydration Therapy* (1:40) [www.pbs.org/wgbh/rxforsurvival/series/video/d\\_dia1\\_dis\\_oralretherapy.html](http://www.pbs.org/wgbh/rxforsurvival/series/video/d_dia1_dis_oralretherapy.html)

Website: *ChildInfo: Diarrheal Disease* <http://www.childinfo.org/709.htm>

Document: *Diarrheal Disease: Solutions to Defeat a Global Killer* [http://www.eddcontrol.org/files/Solutions\\_to\\_Defeat\\_a\\_Global\\_Killer.pdf](http://www.eddcontrol.org/files/Solutions_to_Defeat_a_Global_Killer.pdf)

<sup>60</sup> Institute for One World Health. <http://www.oneworldhealth.org/causes> (2009)

<sup>61</sup> PATH. *Diarrheal Disease: Solutions to Defeat a Global Killer*, Washington, DC. [http://www.eddcontrol.org/files/Solutions\\_to\\_Defeat\\_a\\_Global\\_Killer.pdf](http://www.eddcontrol.org/files/Solutions_to_Defeat_a_Global_Killer.pdf)

<sup>62</sup> PBS, *Rx for Survival: Diarrheal Diseases*, [http://www.pbs.org/wgbh/rxforsurvival/series/diseases/diarrheal\\_diseases.html](http://www.pbs.org/wgbh/rxforsurvival/series/diseases/diarrheal_diseases.html) (2006).

<sup>63</sup> WHO, "WHO promotes research to avert diarrhea deaths", *WHO*, Mar 10, 2009.

# Fact Sheet 4

## Sanitation and Disease

*Sanitation engineers have accomplished more to improve health and save lives than all the medical doctors of the past 150 years.*  
—Rx for Survival

- **At risk.** Of the 120 million children born in the developing world each year, half will be born into households with no access to improved sanitation facilities such as pit latrines or flush toilets. One fifth will not have access to improved water sources, such as covered wells.<sup>64</sup> 3,800 children die each day from diseases caused by unsafe drinking water and poor sanitation.<sup>65</sup>
- **Clean water means life.** Unsafe water is a breeding ground for disease. Water-related diseases include those caused by micro-organisms in drinking water, water-borne diseases (e.g. cholera), and vector-borne diseases (e.g. malaria-carrying mosquitoes). No other humanitarian intervention has a more dramatic effect on mortality rates than access to clean water and sanitation.
- **Poor hygiene and sanitation cause infection.** Intestinal infections caused by parasites are contracted through poor hygiene and sanitation and contaminated food or drinking water. Parasites consume nutrients, causing malnutrition and hindering a child's physical and mental development.
- **Regional disparities.** In most developed countries, more than 90% of the population has access to improved sanitation, compared to 50-56% in developing countries. Nearly 80% of the unserved population lives in Southern Asia, Eastern Asia and sub-Saharan Africa. More than one billion people, about one-sixth of the world's population, do not have access to safe drinking water. About 75% of them live in rural areas.<sup>66</sup>
- **Lack of sanitation slows achievement of the Millennium Development Goals.** The target by 2015 is 75% of people with access to improved water sources. Child and maternal health, universal primary education and environmental sustainability all require access to clean water and sanitation. Although 1.2 billion people gained access to improved water sources between 1990 and 2004, world population growth will leave 900 million without access by 2015. The problem is greatest in sub-Saharan Africa, where the unserved population will grow by 47 million.

### Safe Water, Safe Children

In Mataba, a village in the Eastern Democratic Republic of the Congo, getting clean water for households used to be a dangerous undertaking. Girls walked two hours to fetch water for their families, putting them at risk of being attacked, raped and abducted. They were also missing school and losing out on their education.

Today families in Mataba are benefitting from World Vision's Water, Sanitation and Hygiene (WASH) project. The health centre in Mataba gets funding from World Vision to help the doctors run the facility properly.

Taps have been installed in the area so women and children no longer need to walk two hours to the closest clean water point. The water in these taps is piped from springs five km away, and there are 15 water points along this pipe for people to access. The WASH project has also constructed 33 blocks of six latrines in and around Mataba.

The system of clean water is so successful that people from other villages are coming to use these taps and constantly ask when they can get taps in their own villages.

### Research, Think, Debate

Research: The difference between water-borne and vector-borne diseases and treatments.

Think: If you had limited access to good water or sanitation facilities, how would your daily life be affected?

Debate: Providing access to safe water and sanitation is/is not the most important intervention for reducing child mortality.

### Additional Resources

Video: *GOOD: Drinking Water* (3:08) [http://www.youtube.com/watch?v=\\_R\\_vpNQ0fJc&feature=channel](http://www.youtube.com/watch?v=_R_vpNQ0fJc&feature=channel)

Website: *UNICEF: Water, Sanitation and Hygiene* <http://www.unicef.org/wash/>

Audio: *CBC: The Current: Bindeshwar Pathak Feature* (25:21) <http://www.cbc.ca/thecurrent/2009/200904/20090406.html>

<sup>64</sup> UNICEF, *Progress for Children: A Report Card on Water and Sanitation*, [http://www.unicef.org/publications/files/Progress\\_for\\_Children\\_No.\\_5\\_-\\_English.pdf](http://www.unicef.org/publications/files/Progress_for_Children_No._5_-_English.pdf) (2006).

<sup>65</sup> World Vision Canada News Centre. *Water and Sanitation*. <http://www.worldvision.ca/About-Us/News-Centre/Advocacy/Pages/Water-and-Sanitation.aspx> (2009).

<sup>66</sup> World Health Organization and UNICEF. *Meeting the MDG Drinking Water and Sanitation Target*. [http://www.who.int/water\\_sanitation\\_health/monitoring/jmpfinal.pdf](http://www.who.int/water_sanitation_health/monitoring/jmpfinal.pdf) (2006).



# Fact Sheet 5

## Malaria

*We can rid the world of the scourge of malaria. We have the means. We often lack the political will.*

— Archbishop Desmond Tutu

- **Malaria has a “middle man.”** In the late 1890s, it was discovered that malaria is caused by the plasmodia parasite that lives inside mosquitoes. The parasite is transmitted to humans through the bite of an infected mosquito.<sup>67</sup>
- **Malaria is the fourth leading cause of child deaths.** More than 2,000 children under five – one child every 40 seconds – die from malaria each day.<sup>68</sup>
- **Undernourished children are the most vulnerable.** An estimated 57% of malaria deaths are attributable to underlying malnutrition.<sup>69</sup>
- **Malaria threatens the health of pregnant mothers and newborns.** Malaria is a prime cause of low birth weight, anemia and infant deaths. Every year more than 10,000 maternal deaths are caused by malaria.<sup>70</sup>
- **Malaria is preventable.** Preventing the mosquito bite prevents the disease. Approximately 99% of mosquitoes carrying the malaria-causing parasite bite at night. Sleeping under an insecticide-treated bed net and spraying insecticide inside homes is a simple way to prevent malaria.
- **Malaria is treatable.** The proper combination of drugs can effectively treat malaria. However, treatment efforts are being undermined by counterfeit drugs and growing drug-resistance among populations. As well, many communities lack the health facilities and access to drugs needed to treat malaria.

### Zeinabou's Story: Safe with Bed Nets

In Niger, Zeinabou is the eldest of six children. Originally there were seven.

At the age of 14, Zeinabou helps care for her younger siblings. She teaches them how to draw and solve math problems. She helps her mother fetch water, clean clothes, and sweep the house. But she will never forget that someone is missing.

“One of my brothers died. He died from malaria a long time ago,” she says. Zeinabou's brother, Issakou, was three years old when he died from malaria. With a high fever and the infection invading his small body, help couldn't come fast enough.

Zeinabou knows what malaria feels like. “I feel cold. I feel fever. I can't sleep because I get a headache. When I was sick, World Vision carried me to the clinic and bought medicine for me.” Her family has received other gifts from World Vision: food, goats, clothes, school supplies, and two mosquito nets to protect the entire family.

Zeinabou's mother says, “There is a change [since] before we got mosquito nets and now. When we didn't have mosquito nets, mosquitoes used to bite us, but now that we have them, they don't. Our health is better.”

Now Zeinabou sleeps easier knowing she and her siblings are protected. “It makes me happy,” she says.

### Research, Think, Debate

Research: The ban on DDT in industrialized countries. What makes DDT an effective insecticide?

Think: If global warming leads to malaria cases in Canada, should DDT be reintroduced to control mosquito populations? Why or why not?

Debate: Spraying of DDT should/should not be used to kill malaria-carrying mosquitoes in affected areas.

### Additional Resources

Video: *Kill or Cure? The World's Deadliest Diseases: Malaria* (13:11) <http://www.rollbackmalaria.org/multimedia/video.html>

Website: *Rollback Malaria* <http://www.rollbackmalaria.org/index.html>

Document: *WHO Malaria Fact Sheet* <http://www.who.int/mediacentre/factsheets/fs094/en/index.html>

<sup>67</sup> PBS, *Rx for Survival: Malaria*, <http://www.pbs.org/wgbh/rxforsurvival/series/diseases/malaria.html> (2006).

<sup>68</sup> UNICEF, *State of the World's Children*, <http://www.unicef.org/sowc08/docs/sowc08.pdf> (2008).

<sup>69</sup> World Food Programme, *World Hunger Series 2007: Hunger and Health*, [http://www.wfp.org/sites/default/files/World\\_Hunger\\_Series\\_2007\\_Hunger\\_and\\_Health\\_EN.pdf](http://www.wfp.org/sites/default/files/World_Hunger_Series_2007_Hunger_and_Health_EN.pdf) (2007).

<sup>70</sup> UNICEF, *ibid*.

# Fact Sheet 6

## Malnutrition

*Children must get the best possible start in life. Their survival, protection, growth and development in good health with proper nutrition are the essential foundation of human development.*

— A World Fit for Children, United Nations General Assembly

- **Malnutrition covers a broad range of nutritional problems.** *Stunting* is a chronic restriction of growth caused by insufficient nutrients and calories. *Wasting* (or *acute malnutrition*) is the result of rapid weight loss or a failure to gain weight. *Undernutrition* is associated with stunting and wasting caused by not enough micronutrients (vitamins and minerals), calories and proteins being consumed. *Overnutrition* is associated with obesity, caused by too many calories being consumed.

- **A simple diagnosis.** The mid-upper-arm-circumference tool (MUAC) is used to determine the severity of malnutrition in children aged six to 59 months. The circumference of the upper arm is measured with a paper band called the bracelet of life.<sup>71</sup>

- **Almost 20 million children suffer from severe acute malnutrition (SAM).** Most live in South Asia or sub-Saharan Africa. In children aged six to 59 months, an arm circumference less than 110 mm indicates SAM. It can be a direct cause of death, or an indirect cause, as it increases the chance of dying from preventable diseases such as diarrhea and pneumonia. Poverty, poor access to health care, and lack of education about healthy feeding all contribute to child malnutrition.<sup>72</sup>

- **Between 35-50% of all under-five deaths have malnutrition as an underlying cause.** Malnutrition weakens the immune system and increases the risk a child will die from premature birth, pneumonia, diarrhea, malaria, AIDS or other diseases.

- **Malnutrition can be prevented.** Ready-to-use therapeutic foods (RUTFs) such as peanut-butter based Plumpy'nut, are used to treat severe cases of child malnutrition. Education about proper nutrition and the benefits of breastfeeding, access to nutritious food and vitamin and mineral supplements, immunization of children and access to clean water and sanitation, are all important interventions for keeping malnutrition at bay.

### When Being Different is Good

*Positive Deviance (PD)* is based on the observation that in every community there are individuals or groups practicing uncommon behaviours resulting in solutions to challenging problems. These people are positive deviants: positive because they are doing something right, and deviants because they are behaving outside of the norms. They face the same challenges and have access to the same resources as their peers, but get results where others do not.

One example of PD in practice occurred in Vietnam in 1991. Jerry Sternin, the director in Vietnam for Save the Children, was studying how some families in poor communities managed to avoid malnutrition.

Sternin discovered that the caregivers in these families were collecting tiny shrimps and crabs from rice paddy fields and adding them, along with sweet potato greens, to their children's food. These foods were available to everyone, but other community members thought them inappropriate. The PD families were also feeding their children three or four times a day, instead of the customary two times.

The community developed an activity to teach others these uncommon feeding behaviours. The pilot project resulted in several hundred malnourished children being rehabilitated.

Source : Positive Deviance Initiative, [http://www.positivedeviance.org/about\\_pd/case\\_studies.html](http://www.positivedeviance.org/about_pd/case_studies.html) (2009).

### Research, Think, Debate

Research: The benefits of ready-to-use therapeutic foods and the Plumpy'nut patent controversy.

Think: Plumpy'nut is patented to be made only by Nutriset until 2018. Should humanitarian organizations be allowed to make their own version of Plumpy'nut?

Debate: Humanitarian interventions that can save millions of lives should/should not be free from patents.

### Additional Resources

Audio: World Vision Report: Peanut Butter Care (5:03) <http://www.worldvisionreport.org/Stories/Week-of-Nov-8-2008/Peanut-Butter-Care>

Website: Childinfo: Child Nutrition <http://www.childinfo.org/nutrition.html>

Document: World Vision: Nutrition and Health

[http://www.worldvision.ca/Programs-and-Projects/International-Programs/Documents/Nutrition\\_and\\_Health\\_web\\_v3\\_ICP-1230.pdf](http://www.worldvision.ca/Programs-and-Projects/International-Programs/Documents/Nutrition_and_Health_web_v3_ICP-1230.pdf)

<sup>71</sup> Print out a MUAC band at Doctors Without Borders:

<http://www.doctorswithoutborders.co.nz/education/activities/braceletoflife/braceletoflife-print.html>

<sup>72</sup> WHO. Community-Based Management of Severe Acute Malnutrition.

[http://www.who.int/child\\_adolescent\\_health/documents/pdfs/severe\\_acute\\_malnutrition\\_en.pdf](http://www.who.int/child_adolescent_health/documents/pdfs/severe_acute_malnutrition_en.pdf)

# Survive to Five

## Module I Role Play Cards

### Australia (Jack/Isabella)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family often eats meat
- I was not breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Only my father is employed

### Afghanistan (Soraya)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family eats mostly potatoes
- My mother was malnourished & could not breastfeed me
- There is access to clean water near my home
- My home neither has a water tap nor a toilet
- I am a girl and cannot attend school
- My mother is not educated
- There is no malaria where I live
- Both my parents are alive
- My older siblings work instead of going to school

### Brazil (Augusto/Maria)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water and a water tap but no toilet
- I attend school
- My mother is not educated
- There is no malaria where I live
- My father died from AIDS
- Only my mother has a job

### Canada (Stephen/Caroline)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family often eats meat
- I was breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Both my parents are employed

### China (Li/Ying)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal a day
- My family sometimes eats meat
- My mother was malnourished and could not breast-feed me
- My home has clean water and a water tap but no toilet
- I attend school
- My mother was not educated
- There is no malaria where I live
- My mother died from AIDS
- My father does not have a job

### Dominican Republic (Juan/Gloria)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat three meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water, a water tap and a toilet
- I attend school
- My mother is not educated
- There is malaria where I live but I do not have a bed net
- Both my parents are alive
- Only my father has a job and my siblings need to work

# Survive to Five

## Module I Role Play Cards (cont'd)

### Ethiopia (Amina)

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal a day
- My family eats mostly ground cassava root
- My mother was malnourished and could not breastfeed me
- There is no clean water, water tap or toilet in my home
- I am a girl and do not attend school
- My mother is not educated
- There is no malaria where I live
- My father died from AIDS
- My mother is not employed so I must work to help her

### France (Thomas/Mathilde)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family often eats meat
- I was breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Both my parents are employed

### Haiti (Emmanuel/Johanne)

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal a day
- My family eats mostly rice
- My mother was malnourished and could not breastfeed me
- There is no clean water, water tap or toilet in my home
- I do not attend school
- My mother is not educated
- There is malaria where I live and I have a bed net
- My father died from AIDS
- My mother is not employed so my siblings must work to help her

### India (Vikram/Priyanka)

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic in my community
- Sometimes I go a day without eating
- My family eats mostly rice
- I was breastfed as an infant
- There is clean water near my home and a water tap but no toilet
- I attend school
- My mother is not educated
- There is no malaria where I live
- My mother died from AIDS
- My father is not employed so I must work to help him

### Japan (Hiroshi/Yoko)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family sometimes eats meat
- I was not breastfed as an infant
- My home has clean water, a water tap and a toilet
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Both my parents are employed

### Malawi (Chikumbu/Saliza)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal a day
- My family eats mostly ground cassava root
- I was breastfed as an infant
- My home is near clean water and a water tap but does not have a toilet
- I do not attend school
- My mother is not educated
- There is malaria where I live but I have no bed net
- My father died from AIDS
- My mother is unemployed so my siblings work

# Survive to Five

## Module I Role Play Cards (cont'd)

### Mexico (Alejandro/Gabriela)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat three meals a day
- My family eats mostly corn
- I was breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Only my father is employed

### Nicaragua (Ernesto/Talia)

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat two meals a day
- My family eats mostly corn
- I was breastfed as an infant
- There is clean water, a water tap but no toilet in my home
- I attend school
- My mother is educated
- There is malaria where I live and I have a bed net
- Both my parents are alive
- Only my father is employed

### Niger (Hadiza)

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal a day
- My family eats mostly ground cassava root
- I was not breastfed as an infant
- There is clean water near my home, but no water tap or toilet
- I am a girl and do not attend school
- My mother is not educated
- There is no malaria where I live
- Both my parents are alive
- Only my father is employed

### Peru (Andres/Cecilia)

- My birth weight was above 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water and a water tap but no toilet
- I attend school
- My mother is not educated
- There is no malaria where I live
- Both my parents are alive
- Only my mother has a job

### Sierra Leone (Samuel/Mariama)

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic in my community
- I eat only one meal every other day
- My family eats mostly ground cassava root
- I was not breastfed as an infant
- There is no clean water, water tap or toilet in my home
- I do not attend school
- My mother is not educated
- There is malaria where I live but I do not have a bed net
- Both my parents died from AIDS
- My siblings have to work instead of going to school

### South Africa (Mamello/Puleng)

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water and a water tap but no toilet
- I attend school
- My mother is not educated
- There is malaria where I live and I have a bed net
- Both my parents died from AIDS
- My older siblings must work

# Survive to Five

## Module I Role Play Cards (cont'd)

### **Sri Lanka (Kasun/Dilini)**

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family eats mostly rice
- My mother was malnourished and could not breastfeed me
- There is clean water and a water tap but no toilet near my home
- I attend school
- My mother was not educated
- There is malaria where I live and I do not have a bed net
- Both my parents are alive
- Only my father has a job

### **Tanzania (Endari/Amidah)**

- My birth weight was under 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat only two meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water and a water tap but no toilet
- I attend school
- My mother was educated
- There is malaria where I live but I do not have a bed net
- My mother died from AIDS
- My father is employed but my siblings also work

### **Uganda (Willy/Eseeri)**

- My birth weight was under 2500 g (5.5 lbs)
- I did not receive any vaccination shots as an infant
- There is no health clinic close to my community
- I eat only two meals a day
- My family sometimes eats meat
- I was breastfed as an infant
- My home has clean water and a water tap nearby but no toilet
- I attend school
- My mother was not educated
- There is malaria where I live and I have a bed net
- My mother died from AIDS
- My father is employed

### **Ukraine (Ivan/Katerina)**

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic close to my community
- I eat three meals a day
- My family often eats meat
- I was breastfed as an infant
- My home has clean water, a water tap and a toilet
- I attend school
- My mother is educated
- There is no malaria where I live
- My father died from AIDS
- Only my mother has a job

### **United Kingdom (Daniel/Emma)**

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family often eats meat
- I was not breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Both my parents are employed

### **USA (Andrew/Julia)**

- My birth weight was above 2500 g (5.5 lbs)
- I received all my vaccination shots as an infant
- There is a health clinic in my community
- I eat three meals a day
- My family often eats meat
- I was breastfed as an infant
- There is clean water, a water tap and toilet in my home
- I attend school
- My mother is educated
- There is no malaria where I live
- Both my parents are alive
- Both my parents are employed

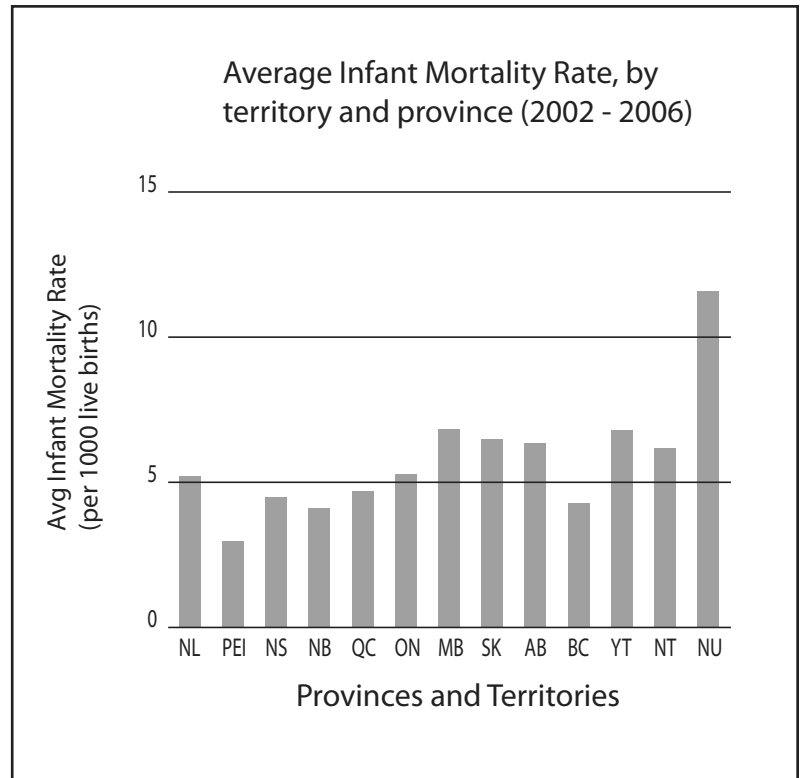
# Teacher Resource

## Module 3 Answer Key

Answers for *Infant Mortality in Canada* assignment (p. 30)

### Part 1

Average Infant Mortality Rate, by territory and province (per 1000 live births)	
<b>NF</b>	5.2
<b>PEI</b>	3.0
<b>NS</b>	4.5
<b>NB</b>	4.1
<b>QC</b>	4.7
<b>ON</b>	5.3
<b>MB</b>	6.9
<b>SK</b>	6.5
<b>AB</b>	6.4
<b>BC</b>	4.3
<b>YT</b>	6.8
<b>NT</b>	6.2
<b>NU</b>	14.1



### Analysis

1. The highest average infant mortality rates are in Nunavut (14.1), Yukon (6.8) and Manitoba (6.9). The lowest average infant mortality rates are in Prince Edward Island (3.0), New Brunswick (4.1) and British Columbia (4.3).
2. Answers will vary but may include geographic isolation, malnutrition, poor access or limited funding for healthcare, lack of parental education, discrimination, lack of political will, etc.

# Teacher Resource

## Module 3 Answer Key

### Part 2

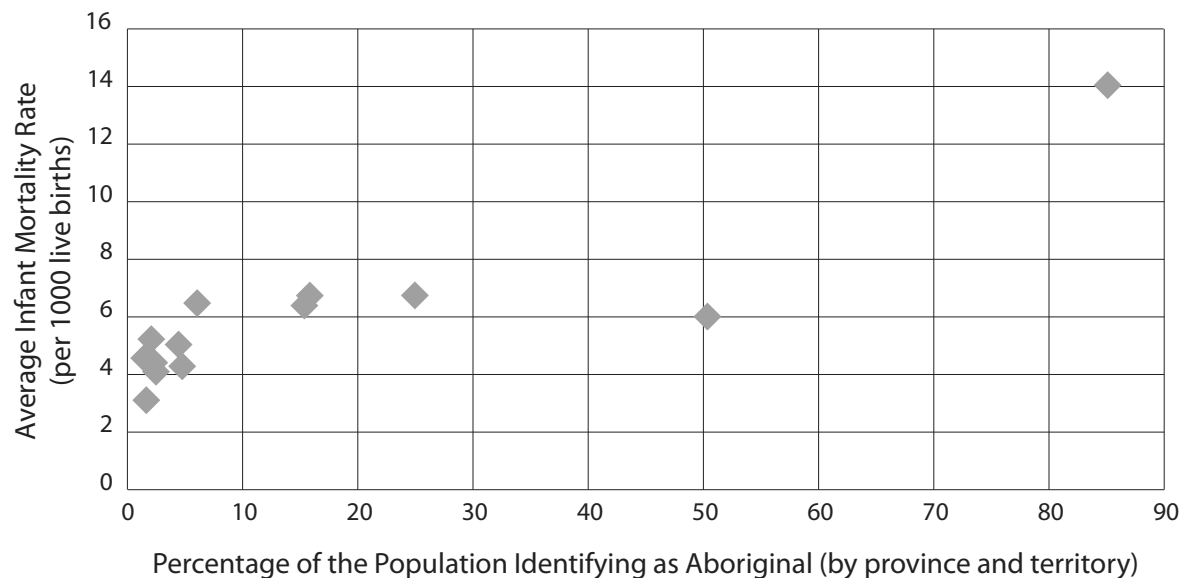
Percentage of each Provincial and Territorial population that identifies as Aboriginal (2006)

<b>NF</b>	4.7
<b>PEI</b>	1.3
<b>NS</b>	2.7
<b>NB</b>	2.5
<b>QC</b>	1.5
<b>ON</b>	2.0
<b>MB</b>	15.5
<b>SK</b>	14.9
<b>AB</b>	5.8
<b>BC</b>	4.8
<b>YT</b>	25.1
<b>NT</b>	50.3
<b>NU</b>	85.0

### Analysis

1. The higher the proportion of residents who identify as Aboriginal, the higher the average infant mortality rate.
2. Answers will vary but may include lack of education for Aboriginal parents on proper feeding and care of infants; isolation on the reserves; limited access to quality healthcare; transportation issues; poor quality diet; drug and alcohol abuse by parents; social stigma, etc.

Analysing the Relationship between Infant Mortality Rate and Percentage of the Population Identifying as Aboriginal, by Canadian Province and Territory (2006)





# Teacher Resource

## Module 3 Answer Key

Answers for *Reducing Child Mortality* assignment (p. 32)

**Table 1.** Levels and trends in under-5 mortality (1990-2008)

Year	World-wide under-five deaths (in millions)	First Difference
1990	12.5	11.4 - 12.5 = -1.1
1995	11.4	10.4 - 11.4 = -1.0
2000	10.4	9.3 - 10.4 = -1.1
2005	9.3	8.9 - 9.3 = -0.4
2007	8.9	8.8 - 8.9 = -0.1
2008	8.8	

### Analysis

1. First differences tell us that this is not a perfect linear relationship. Under-five deaths are not dropping at a constant rate and we know this because the first differences at each interval vary. For the relationship to be linear all the first differences would need to be the same value.
2. The graph shows a negative or inverse relationship between under-five deaths and time: over time the number of under-five deaths decreases.
3. Based on the graph, under-five deaths will be approximately 8.2 million in 2010 and 7.2 million in 2015.
4. According to the above estimates, the world is not on track to reach the MDG4 target in 2015 of reducing child mortality by 2/3 of 1990 levels. A 2/3 reduction of 1990 levels would be:

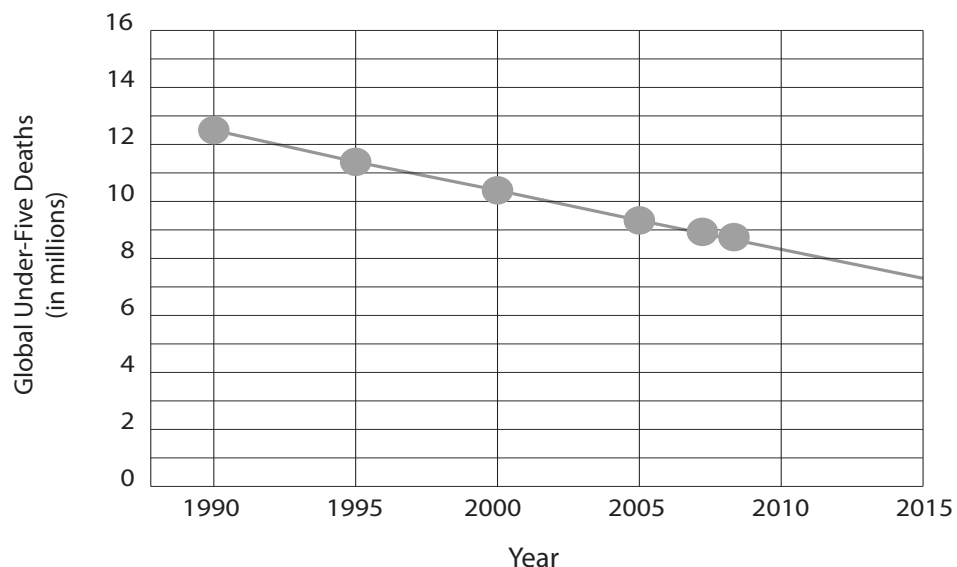
$$\frac{2}{3} \text{ (as a decimal = 0.666)} \times 12.5 \text{ million} = 8.25 \text{ million}$$

$$12.5 \text{ million} - 8.25 \text{ million} = 4.25 \text{ million}$$

To be on track we would need to see a projected 2015 estimate of 4.25 million on the graph. If trends in child mortality continue, our graph predicts child mortality will be approximately 7.2 million in 2015 – significantly off track to meet this Millennium Development Goal.

5. Answers will vary, but can include widespread immunization programs; improved access to clean water and sanitation; distribution of vitamin and mineral supplements; lower birth rates; and improved maternal healthcare.

Reductions in Under-Five Deaths Over Time  
(1990-2008)



# Alive at Five

## Glossary of Technical Terms

**Acute Respiratory Infection** is severe infection of the upper or lower respiratory system, such as pneumonia.

**Copenhagen Consensus** is a project that seeks to establish priorities for advancing global welfare based on the theory of welfare economics.

**Group of Eight (G8)** is an annual forum or summit meeting of the heads of states of the wealthiest nations of the world. The members are Canada, USA, United Kingdom, France, Italy, Germany, Japan, and Russia.

**Improved Sanitation Facilities** include flush toilets, pit latrines and composting toilets. Ideally they are private and not shared between households. They are hygienic and ensure no contact with human waste.

**Improved Water Sources** are protected from outside contamination, particularly from human waste. They include piped water into dwellings, public water taps, protected wells and collected rainwater or spring water.

**Malnutrition** develops when the body lacks the vitamins, minerals and other nutrients needed for healthy functioning. It can be caused by inadequate food intake, imbalance of nutrients or poor absorption of nutrients.

**Maternal Health** refers to the health of women during pregnancy, childbirth and the post natal period.

**Micronutrients** are vitamins and minerals needed in small daily quantities for healthy growth and metabolism.

**Mid-Upper Arm Circumference (MUAC)** is a measurement of the circumference of the upper arm at midpoint, used as a quick assessment of a child's nutritional status and upper arm wasting.

**Millennium Development Goals (MDGs)** are eight development goals agreed to by 189 UN member countries. The goals focus on reducing poverty and hunger, tackling ill-health, gender inequality, lack of education, lack of access to safe water and environmental degradation by the year 2015.

**Neonatal** refers to the newborn period which is the first four weeks (28 days) after birth.

**Oral Rehydration Therapy (ORT)** is the administration of special fluids by mouth to treat acute dehydration.

**Plumpy'nut** is a peanut-butter based ready-to-use therapeutic food used to treat severe malnutrition in children.

**Positive Deviance** is based on the observation that in every community there are certain "deviant" individuals or groups whose "abnormal" practices or behaviors result in a better solution to a prevalent problem than the behaviours of other community members with access to the same resources.

**Ready-to-Use Therapeutic Foods (RUTFs)** are foods designed for specific nutritional and therapeutic purposes.

**Stunting** is the chronic restriction of height growth for age, usually due to insufficient nutrient and caloric intake.

**Under Five Mortality Rate (U5MR)** is the probability, expressed as a rate per 1,000 live births, of a child born in a specific year to die before the age of five.

**Vector-borne Diseases** are transmitted to humans by insects or animals. This includes mosquitoes carrying the malaria parasite.

**Wasting** (also called severe or acute malnutrition) develops as a result of rapid weight loss or failure to gain proper weight for height.

**Undernutrition** is the outcome of insufficient food intake and repeated infectious diseases. It includes being underweight for one's age, too short for one's age (stunted), dangerously thin for one's height (wasted) and deficient in vitamins and minerals (micronutrient malnutrition).

# Alive at Five

## Further Resources

### Classroom Activities

Cancer Research UK. Youth and Schools Lesson Plan: Design Your Own Health Campaign. (2009)  
[http://publications.cancerresearchuk.org/WebRoot/crukstoredb/CRUK\\_PDFs/lessonplans/ys\\_lesson\\_healthcampaign.pdf](http://publications.cancerresearchuk.org/WebRoot/crukstoredb/CRUK_PDFs/lessonplans/ys_lesson_healthcampaign.pdf)

Landers, C. and S. Moger. Child Survival: A Global Challenge. UNICEF Educator's Guide. (2008)  
[http://youth.unicefusa.org/assets/pdf/teachunicef-youthreporthischool\\_final.pdf](http://youth.unicefusa.org/assets/pdf/teachunicef-youthreporthischool_final.pdf)

PBS. Rx for Survival: A Global Health Challenge: For Teachers. (2006)  
<http://www.pbs.org/wgbh/rxforsurvival/series/teachers/index.html>

### Online

Gapminder.org  
Engaging videos, interactive graphs and current statistics on child health and other development issues.  
[www.gapminder.org](http://www.gapminder.org)

World Vision Area Development Project Updates  
Learn more about World Vision's work to improve child well-being in specific countries.  
<http://www.worldvision.ca/ADP/Pages/Home.aspx>

World Vision Global Future. Child Health: Generating the Will. (Edition 2, 2009)  
This journal of essays by child health and political experts examines the actions needed to realize Millennium Development Goals 4 and 5.  
<http://www.globalfutureonline.org/PolicyAdvocacy/GlblFutr.nsf/issues/401A6B33CD90851F8825762600800041?OpenDocument>

### Media



Video: Rx for Survival (series)  
Explore various health topics with this PBS series.  
<http://www.pbs.org/wgbh/rxforsurvival/series/video/index.html>



YouTube Playlist: Millennium Development Goals – Student Videos  
Students participating in the first Global Model United Nations in August 2009 in Geneva were invited to submit short videos highlighting the progress being made in their countries, or globally, on one of the Millennium Development Goals.  
[http://www.youtube.com/view\\_play\\_list?p=09E8BC92A08D61B1&search\\_query=United+Nations+MDGs](http://www.youtube.com/view_play_list?p=09E8BC92A08D61B1&search_query=United+Nations+MDGs)



Video: GOOD: The Motorcycle Doctors (2:46)  
An innovative strategy to reach rural communities in Zambia with primary healthcare.  
<http://www.good.is/post/the-motorcycle-doctors/>



Flash Animation: World Vision: Water is Life (5:00)  
This riddle about water compares how it is perceived and used by different people.  
<http://www.worldvision.ca/Education-and-Justice/Educational-Resources/Pages/Water-and-the-Environment.aspx>



Audio: CBC The Current: Child Welfare – Native Kids (15:00)  
One in 10 Canadian children live in poverty and many of those children live on reserves. It's being alleged these children do not have the same access to health care, education and other services as children living off reserves.  
<http://www.cbc.ca/thecurrent/2009/200911/20091123.html>



Audio: World Vision Report  
World Vision Report podcasts about development issues around the world.  
[www.worldvisionreport.org](http://www.worldvisionreport.org)

# Alive at Five

The Silent Global Crisis of Child Deaths

Global Education, World Vision Canada

## Feedback Form

Your feedback is important to us as we strive to measure impact and improve our educational resources. Please fill out this form and fax or mail it to us. We appreciate any comments or suggestions.

**School:** \_\_\_\_\_ **City and Province:** \_\_\_\_\_

1. How did you learn about this resource?

\_\_\_\_\_

2. With what grade(s) and subject(s) did you use the resource?

\_\_\_\_\_

3. What was your objective in using the resource?

\_\_\_\_\_

4. Was this resource effective in helping you to meet your objectives?

\_\_\_\_\_

5. Please evaluate the resource according to the following criteria.

	(Poor)	1	2	3	4	(Excellent)
Overall quality of the resource		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Clarity of instructions		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Breadth and depth of subject matter covered		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Comments:

\_\_\_\_\_  
\_\_\_\_\_

6. What component or activity did you find most useful?

\_\_\_\_\_

7. What did you find least useful?

\_\_\_\_\_

8. Please comment on the impact(s) that you perceive resulting from the use of this resource  
(e.g. changed attitudes, actions taken by your group or yourself).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Please provide your name and email address so we can add you to the World Vision Teacher Network. You'll receive up to six e-newsletters per school year about new resources and educational programs.**

**Name:** \_\_\_\_\_ **Email address:** \_\_\_\_\_

Please send this form, along with any comments, by mail or fax to:

**Education and Public Engagement**

World Vision Canada

1 World Drive, Mississauga, ON L5T 2Y4

Fax: 905-696-2166

Email: [global\\_ed@worldvision.ca](mailto:global_ed@worldvision.ca)



Thank you!

**World Vision** is a Christian relief, development, and advocacy organization dedicated to working with children, families, and communities to overcome poverty and injustice. As followers of Jesus, we are motivated by God's love for all people regardless of religion, race, ethnicity, or gender.

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World Vision educational videos, publications, and classroom activities help Canadians develop a greater understanding of global issues so they can take action for social justice.

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**Education and Public Engagement**  
World Vision Canada  
1 World Drive  
Mississauga, ON L5T 2Y4

**Phone:** 1-800-268-1650 ext: 3192  
**Fax:** 905-696-2166  
**Email:** [global\\_ed@worldvision.ca](mailto:global_ed@worldvision.ca)

# Altamas for Peace and Development Association

## *Our Story: Living in a Refugee Camp*







**The SudanMonitor**  
**A Quarterly Magazine of the Sudan Human Rights Association (SHRA)**  
**Volume 17 Issue No. 1 March 2011**

Recommended for grades 10-12



### **Questions for discussion**

1. Where is Sudan?
  - What is the population?
  - What is the political context?
2. Where is Uganda?
  - What is the political context?
  - What impacts do the refugee camps have on the country?
3. What is meant by sustainable solutions?

Imagine that you are currently living in a refugee camp. Consider the following questions:

- Where do the resources come from to sustain the refugee camp?
- How are resources distributed?
- How do you cope with the sudden influx and/or departure of people?
- How do you make sure people are kept safe, especially women and children?
- How do you take control of your own life and avoid becoming dependent? Think about your career, your ability to earn an income, continuing education, and providing yourself and your family with food.