

CHF
Grains for Growth



Lesson 5: Grains for Growth!

Description

2x40 minute lessons and 1x20 minute lesson (to present puppet shows)

In this lesson, students use their creativity and imagination. The story about crops can be used in shared or guided reading, depending on the level of the children. Next, they are able to explore different countries around the world by emotively engaging in the creation of their own puppet show. Scripts are provided, but students can adapt them as they please. Finally after reading and interactively learning about crops, they will be able to indulge their taste buds by sharing a snack with peers.

Subjects

Visual Arts (Grades 1, 2 & 3), Drama and Dance (Grades 1, 2 & 3), Health and Physical Education (Grades 1, 2 & 3), Social Studies (Grades 1, 2 & 3), Science and Technology (Grades 1, 2 & 3)

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

Materials Needed

Stick puppet show:

Popsicle sticks
Crayons
Glue
Scissors

Sharing a snack:

Corn chips
Rice cakes
Whole wheat crackers
Corn nuts and/or Soy nuts
Dips (optional)

Student Handout ([BLM 5.1](#)) explains grain use in different parts of the world.

Student Photographs ([BLM 5.4](#)) depict farming and various crops in rural poor communities.

Student Worksheet ([BLM 5.2](#)) can be photocopied and cut out for puppet heads.

Student Handout ([BLM 5.3](#)) can be photocopied and each script can be given to a different group of students.

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

Lesson Preparation

1. Photocopy [BLM 5.1](#) so that each student has a copy. Photocopy [BLM 5.2](#) so that there is one puppet head for each student.

2. BLM 5.3 can be photocopied six times and cut out so that each student gets a copy of one of the scripts (4 scripts x 6 characters in each = 24 students in total. If there are more students, more children can be added to each family).

3. Gather snacks to share after the lesson. Ensure there are no allergy concerns.

4. Review the Teacher Resource folder for Interesting Facts, Country Information, Country Maps, and Resource Section. The resources found under the Country Information can be used to give students further information about the Caribbean, Ghana and Vietnam (such as maps, statistics, flags, histories, etc.).

Teaching/Learning

1. Read the story about crop use in different parts of the world (BLM 5.1) with the students and have them colour the picture at the bottom of the page. Grade three students could read the story with an older grade (Reading Buddies.)

2. Open slideshow (BLM 5.4), project on screen, and show slides of farming and crops while discussing the pictures. Alternatively, photocopy pictures to be distributed and discussed with students.

- 1) Wheat is an important grain in North America, it is used in many of our foods.
- 2) Rice is being planted. It is an important grain in many Asian countries.
- 3) Rice, being harvested by hand.
- 4) Tef, a grain, is made into a bread and popular in Ethiopia.
- 5) Soy is a legume, high in protein and when inter-planted improves soil fertility.
- 6) Farmers in many areas grow other vegetables to supplement their diets.
- 7) Much of the work is done by hand
- 8) Vegetables, like this lettuce, help improve families' diets and health.
- 9) Paprika (or peppers) are grown as a source of vitamins and nutrients.
- 10) Watermelons help improve diets and extras can be sold for income.
- 11) Groundnuts (peanuts) are a great source of protein and vegetable oil.

3. Divide students into groups of six and give them each a copy of their script (BLM 5.3). Allow students time to read the scripts in their groups or as a whole class so they can decide on what character they will be. Names can also be chosen out of a hat for random assignment of roles.

4. Students then draw in features and colour the photocopies of puppet heads for their characters (BLM 5.2). Students decide if their puppet is male/female, child/adult/elder depending on their script. Students cut out the puppet heads and glue them onto the Popsicle sticks. Suggestion: play music from one of the countries described in the scripts while making puppets.

5. Students use suggested scripts (BLM 5.3) and practice and perform the puppet show. Students can also elaborate on the scripts or write their own.

6. Discuss with students the various characters in the scripts and how things differ. For example, living in urban vs. rural areas; healthy eating practices; the role of plants, soil and water in the different countries; human dependence on plants, etc. (See Teacher Notes)

7. Students have an opportunity to share a snack with each other based on the types of food discussed during the story and scripts. See the Materials Needed section for snack ideas.

Extension Activities

- Prepare an experience chart and vocabulary building activity from the story.
- Invite guest visitors - local farmers to discuss growing grains and/or speakers representing any of the puppet show countries.
- Learning Stations, as available, for background information: library books, pictures or music from Kenya, India, El Salvador and Canada, internet sites.

Teacher Background Notes

Nutrition and Health

CHF helps farmers improve their farming techniques, which in turn improves their overall health and nutrition. Farmers are being introduced to agricultural practices like better seed varieties and improved farming techniques, by attending workshops and training sessions. Consequently, farmers not only grow more crops but they are also able to produce vegetables and fruits. In addition, some of their crops, like peanuts, are marketable and can be sold for a profit. The benefits of these actions can be seen in an improved nutritional status of the family, affording children's school fees and increasing the overall income of the home.

Soy and Inter-planting

Planting soy with maize crops can help with farmers' overall nutrition and crop yield. Inter-planting soy raises nitrogen levels in the soil and acts as an organic fertilizer. It is a cheaper and more environmentally sustainable method than using chemical fertilizers. It has become very popular with resource-poor farmers as a way of improving soils so they can support increased crop production.

Tef

Tef is a grain grown in western Ethiopia, where it is preferred to all other cereals. It is eaten once or twice a day and contributes about two-thirds of the protein of a typical diet. Tef is usually made into a flat bread, called *injera*. The bread is torn off and used to scoop spicy stews which make up the main meals.

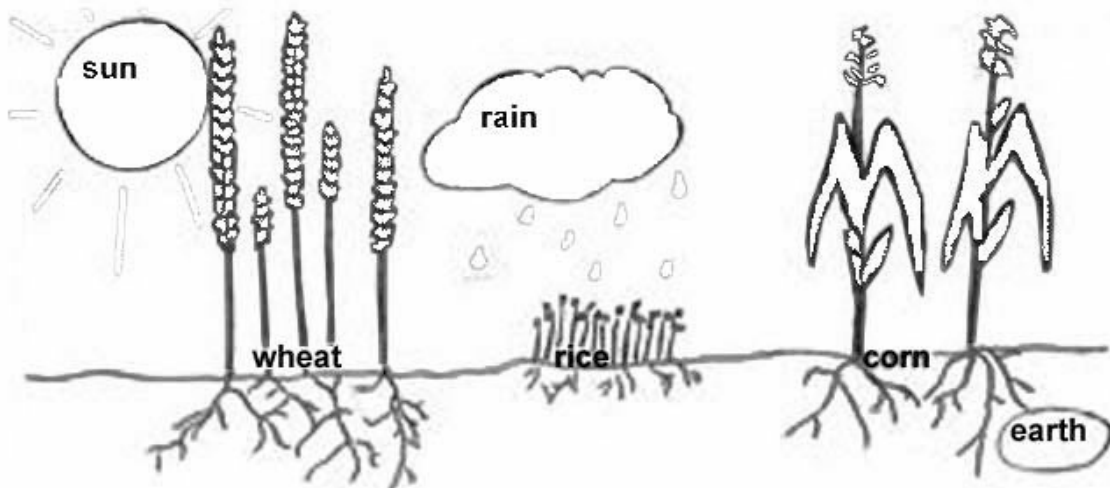
Grains for Growth!

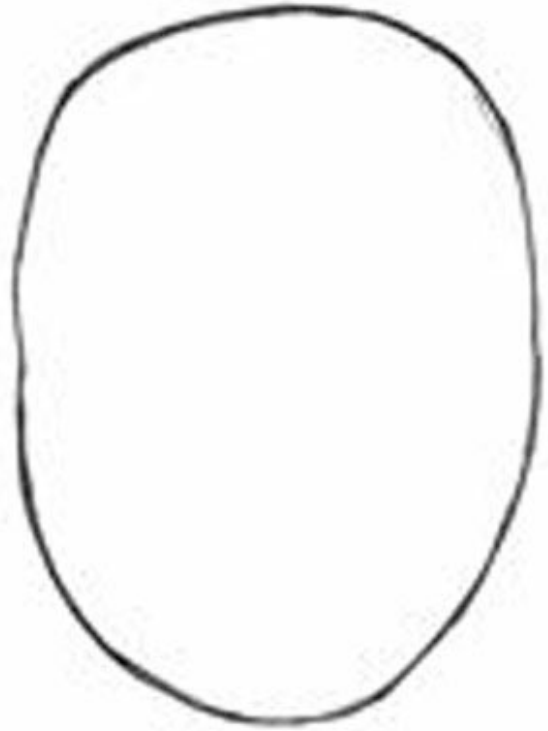
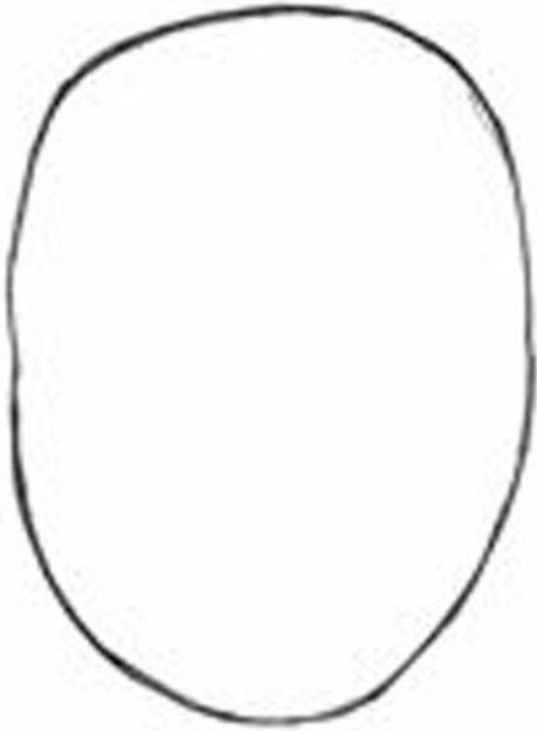
Grains are plants that can be ground into flour to make bread. People all over the world eat different kinds of grains as their daily bread. In Canada we grow **wheat** for our bread, bagels, muffins, pies and cakes. In Ethiopia, farmers grow **tef** and turn it into bread that is eaten with stews. In Asian countries like Vietnam, farmers grow **rice** as the grain that is used.

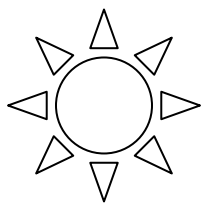
On the farms in Canada, farmers use big tractors and other machines to help plant and harvest the wheat. In other countries, farmers may do most of the work by hand.

In Canada, the farmers are mostly adults. Enough food is grown and sent to the stores and supermarkets for us to buy. In countries like Ethiopia, Ghana and Vietnam, mothers, fathers, grandparents and even children help with growing crops in the countryside. It is harder for the families in these countries to grow enough food for their family because of droughts and floods. Sometimes the children have to miss school to help take care of the farm so the family can have enough to eat. Some Canadian organizations such as CHF help farmers and their families in other countries to learn skills to be able to produce more crops or different vegetables from their fields. Families then have more to eat and any extra food can be sold for a profit. This helps the family so that they can pay for school fees and books so children can attend school.

It does not matter if the farms grow **wheat**, **rice** or **tef**. The plants all need the same three things: **sun**, **rain** and good **earth** to grow in. Can you colour the picture below?







Grains for Growth!

In all countries, children and their families take education very seriously, but sometimes the families need the children to help out at home or on the farm.

Canadians:

Grandpa: "Did you get a new tractor to help you harvest the wheat?"

Father: "Yes. I am glad we were able to grow enough wheat to sell in Canada and to other countries this year."

Mother: "Who wants some toast with their breakfast?"

Boy(s): "I would like a bagel instead."

Girl(s): "I would like cheese and jam on my toast, please."

Grandma: "I will make muffins with you kids after school today."

Ghanaians:

Father: "You are going to have to stay home from school and help to get water for the farm today."

Boy(s): "I want to go to school so I can learn to read and write."

Grandpa: "We all need to help. I will bring the plow."

Mother: "I traded my sewing at the market for a bag of seeds."

Girl(s): "I will help you plant the seeds."

Grandma: "I will make breakfast so you can all work hard."

Vietnamese:

Mother: "Your Grandma is sick. Stir the rice soup for her breakfast."

Grandma: "Thank you. The rice will make me feel better."

Grandpa: "I better have some too. I am not feeling too well either."

Girl(s): "I will stay home from school to help take care of you."

Father: "I will go to the fields to plant more rice."

Boy(s): "I will come and help you."

Ethiopians:

Mother: "Get up! It is 5 o'clock in the morning. We have to take the soy to the market before it gets too hot outside."

Girl(s): "I am tired! It is so far to walk to the market with the soy."

Grandma: "I will begin to make the fire to cook our meals today."

Father: "We have to plant more soy today. There is a good price for it at the market this year."

Grandpa: "We hardly have enough corn for our own family!"

Boy(s): "I will help you clear some more land for our family's soy."

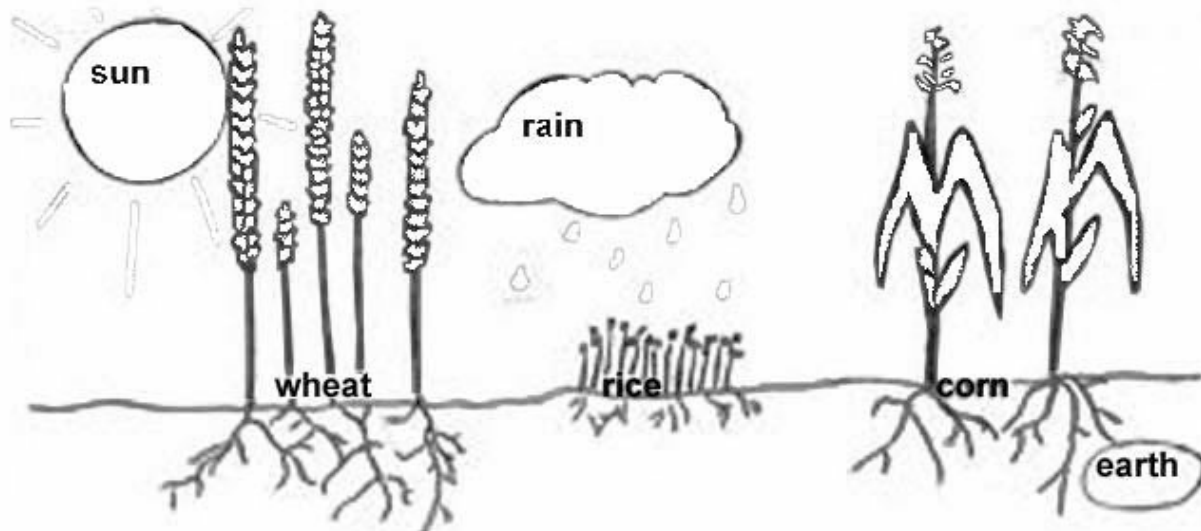
Les céréales ça pousse !

Les céréales sont la base de la farine avec laquelle on fait du pain. Tout le monde mange un certain type de céréale dans son pain quotidien. Au Canada, on cultive le **blé** pour notre pain, nos bagels, nos muffins, nos tartes et nos gâteaux. En Éthiopie, les cultivateurs récoltent le **tef** qu'ils transforment en pain qu'ils mangent avec le ragoût. Dans les pays de l'Asie comme le Vietnam, les agriculteurs cultivent le **riz** comme céréale de base.

Dans les fermes du Canada, les agriculteurs utilisent des gros tracteurs et d'autres machines pour semer et récolter le blé. Dans d'autres pays, les agriculteurs font la plupart du travail à la main.

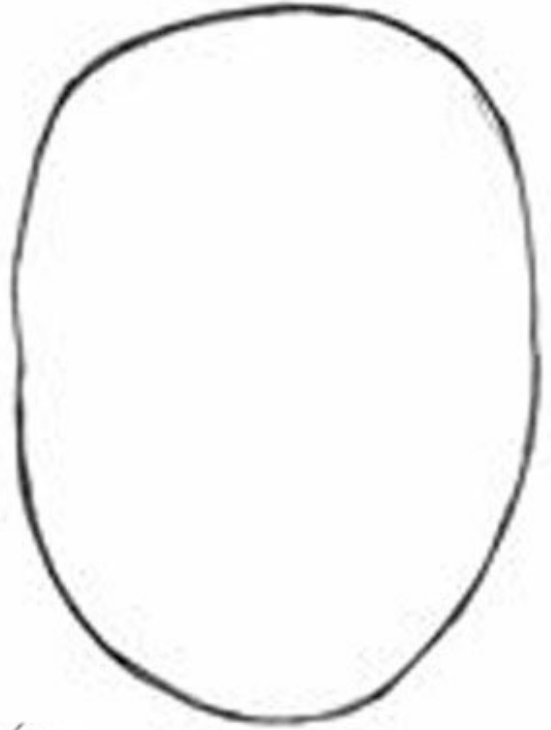
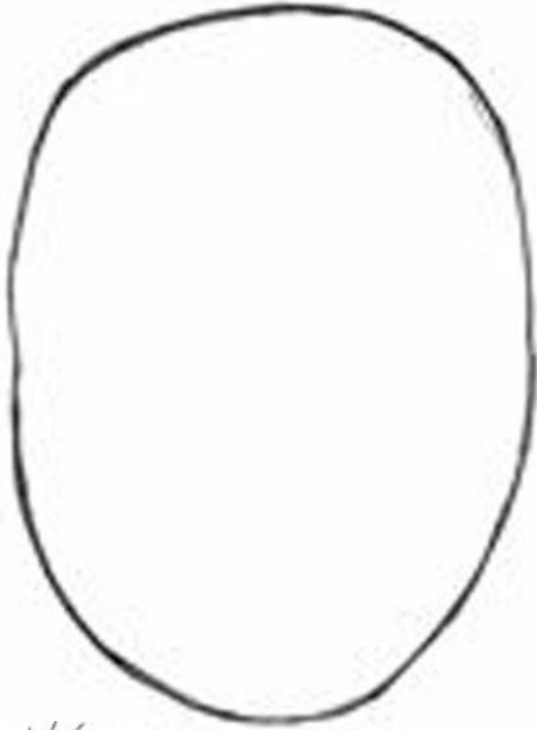
Au Canada, les agriculteurs sont adultes. On récolte suffisamment de nourriture pour l'envoyer dans les magasins et les supermarchés où on achète les produits. Dans les pays comme Éthiopie, Ghana et Vietnam, les mères, pères, grands-parents et même les enfants doivent participer au travail dans les champs. C'est plus difficile dans ces pays pour les familles de faire pousser assez de nourriture pour tout le monde à cause des sécheresses et des inondations. Parfois les enfants doivent s'absenter de l'école pour aider la famille à la ferme et que tout le monde ait à manger. Certains organismes canadiens, comme CHF, aident les agriculteurs à apprendre de nouvelles techniques et faire pousser plus de cultures ou des légumes différents dans leurs champs. Les familles ont donc plus de nourriture et un surplus à vendre pour gagner de l'argent, ce qui permet pour que la famille puisse payer les frais de l'école et les livres aux enfants d'aller à l'école.

Peu importe si on cultive du **blé**, du **riz** ou du **tef**. Toutes les plantes ont besoin de trois choses : du **soleil**, de la **pluie** et une **terre** fertile pour pousser. Pouvez-vous colorier l'image ci-dessous ?



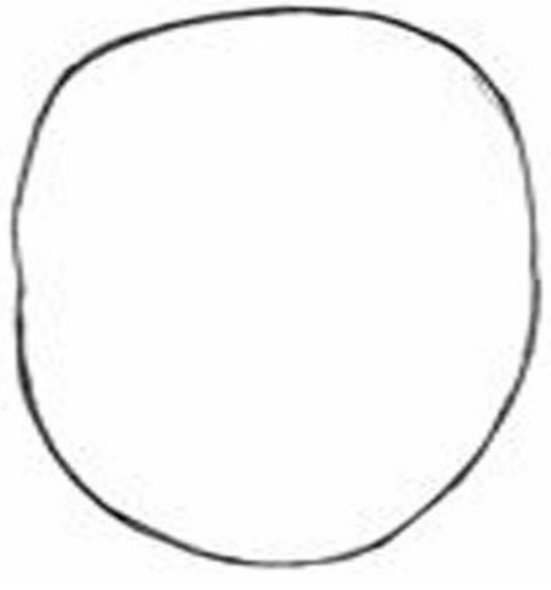
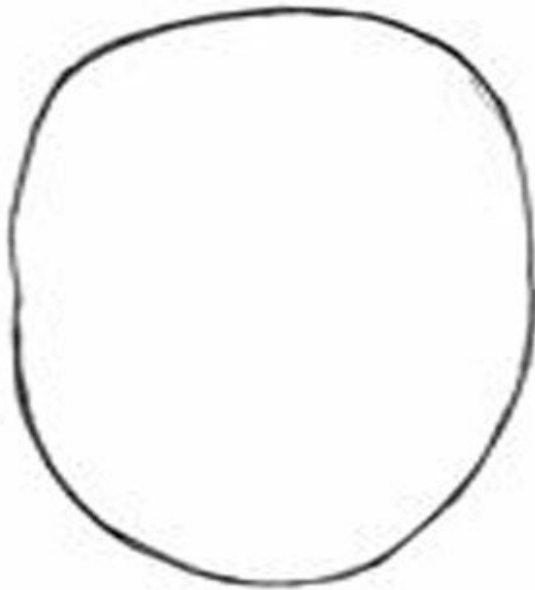
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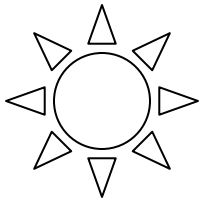
 Les céréales ça pousse !



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Les céréales ça pousse !

Pour tous les enfants et les familles du monde, l'éducation est importante, mais parfois les enfants doivent aider leurs parents à la ferme.

Canadiens :

Grand-père : « As-tu un nouveau tracteur pour récolter le blé ? »

Père : « Oui. Je suis content qu'on ait récolté assez de blé cette année pour en vendre au Canada et dans d'autres pays ».

Mère : « Qui veut une rôtie pour déjeuner ? »

Garçon(s) : « J'aimerais mieux un bagel ».

Fille(s) : « Je voudrais du fromage et de la confiture sur ma rôtie, s'il-te-plait ».

Grand-mère : « Je vais faire des muffins pour les enfants après l'école ».

Ghanéens :

Père : « Il faut que tu restes à la maison aujourd'hui pour nous aider à aller chercher de l'eau pour la ferme ».

Garçon(s) : « Je veux aller à l'école pour apprendre à lire et écrire ».

Grand-père : « Tout le monde doit aider. Je vais amener la charrue ».

Mère : « J'ai troqué au marché les vêtements que j'avais cousus pour un sac de graines »."

Fille(s) : « Je vais vous aider à semer les graines ».

Grand-mère : « Je vais faire le déjeuner pour vous aider à travailler fort ».

Vietnamien :

Mère : « Ta grand-mère est malade. Prépare la soupe de riz pour son déjeuner ».

Grand-mère : « Merci. Je vais me sentir mieux grâce au riz ».

Grand-père : « Je vais en manger aussi. Je ne me sens pas bien non plus ».

Fille(s) : « Je vais rester à la maison aujourd'hui pour m'occuper de vous ».

Père : « Je vais aux champs pour semer plus de riz ».

Garçon(s) : « Je vais t'aider ».

Ethiopiens :

Mère : « Lève-toi ! Il est 5 heures. Il faut amener le maïs à le soja au marché avant qu'il ne fasse trop chaud dehors. ».

Fille(s) : « Je suis fatiguée ! Il faut marcher loin au marché en portant le soja. »

Grand-mère : « Je vais commencer par faire le feu pour cuisiner nos repas aujourd'hui. »

Père : « Il faut planter plus de maïs aujourd'hui. Les prix au marché sont très bons cette année. »».



Vietnam rice planting



Rice Harvesting

Wheat



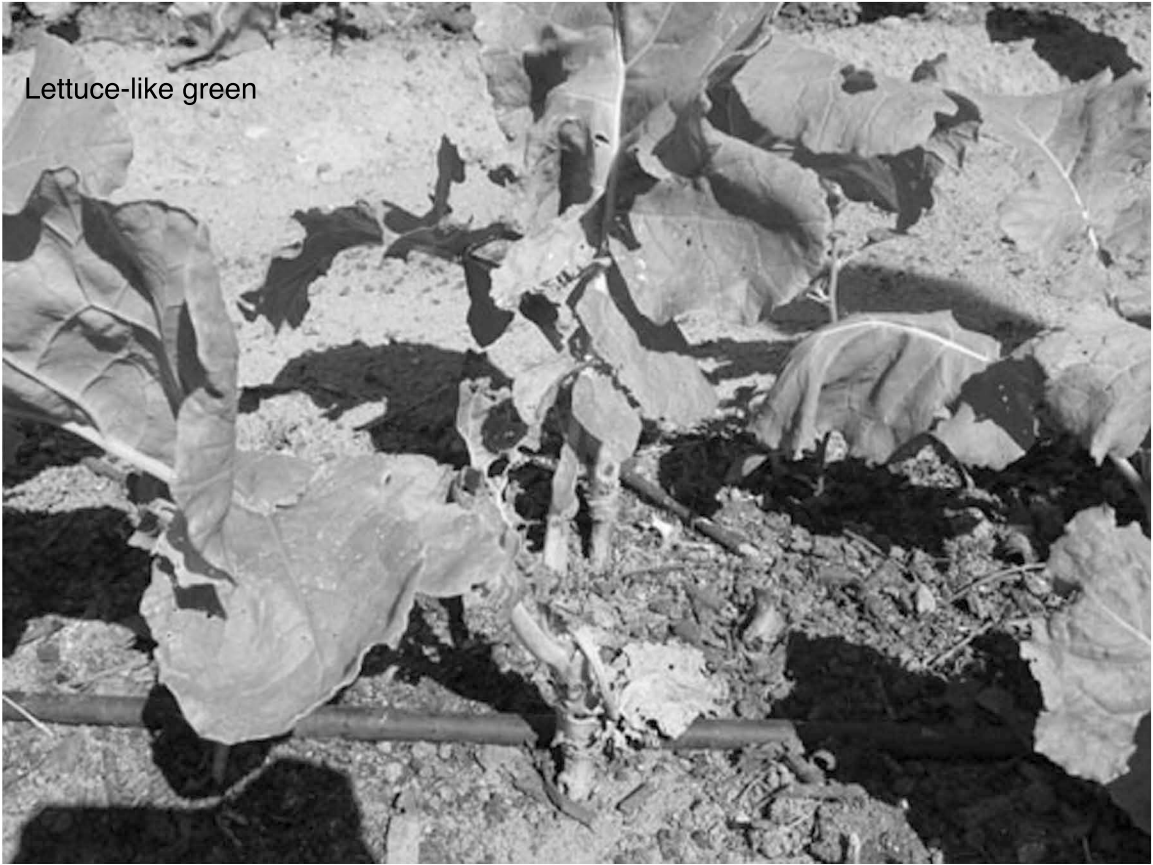
Soy

Tef





Lettuce-like green



Paprika



Watermelon



Groundnuts

Assessment

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

Grains for Growth!

Student's Name: _____

Criteria	Level 1	Level 2	Level 3	Level 4
Knowledge/ Understanding	Demonstrates limited understanding of content	Demonstrates some understanding of content	Demonstrates considerable understanding of content	Demonstrates thorough understanding of content
Thinking	Uses planning skills with limited effectiveness	Uses planning skills with some effectiveness	Uses planning skills with considerable effectiveness	Uses planning skills with a high degree of effectiveness
	Uses critical/creative thinking processes with limited effectiveness	Uses critical/creative thinking processes with some effectiveness	Uses critical/creative thinking processes with considerable effectiveness	Uses critical/creative thinking processes with a high degree of effectiveness
Communication	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
	Communicates for different audiences and purposes with limited effectiveness	Communicates for different audiences and purposes with some effectiveness	Communicates for different audiences and purposes with considerable effectiveness	Communicates for different audiences and purposes with a high degree of effectiveness
Application	Transfers knowledge and skills to new contexts with limited effectiveness	Transfers knowledge and skills to new contexts with some effectiveness	Transfers knowledge and skills to new contexts with considerable effectiveness	Transfers knowledge and skills to new contexts with a high degree of effectiveness
	Makes connections within and between various contexts with limited effectiveness	Makes connections within and between various contexts with some effectiveness	Makes connections within and between various contexts with considerable effectiveness	Makes connections within and between various contexts with a high degree of effectiveness