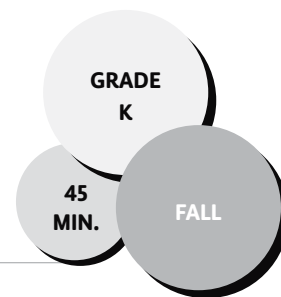


Let Us Grow Lettuce!

THEME: GROWING AND ACCESSING NOURISHING FOOD



ESSENTIAL QUESTION

How can we give plants everything they need to live and grow?

LEARNING OBJECTIVES

- ✓ Students will be able to explain what a plant needs to grow.
- ✓ Students will be able to sow seeds.

CONCEPTS

harvest nutrients seed tool safety

ENGAGING THE CLASSROOM TEACHER

- During Action Step 2, suggest that the teacher take half the students to explore while you take the other half. Ask the teacher to model by participating in the tasting as well.
- During Action Step 4, ask the teacher to assist having students evenly spaced around the bed or to have them lead the seed broadcasting in a second bed for more space.

LESSON DESCRIPTION

Students review what a plant needs to grow and then broadcast and water lettuce seeds in a prepared garden bed. This lesson is designed

to be taught in conjunction with Up, Up, Up We Grow and Fabulous Five.

MATERIALS

- Approximately 1 cup of nursery-grade sand (available at garden centers)
- 1 2-gallon bucket or other container
- 3–4 packets of lettuce seeds, appropriate for your climate; loose-leaf varieties work best for broadcasting the seeds
- 1 large head of lettuce
- 5 watering cans or large bucket and recycled quart-sized yogurt containers
- What a Plant Needs Poster (p. 49)

PREPARATION

- › Learn "Sun, Soil, Water, Air" by the Banana Slug String Band.
- › In your bucket or other container, mix lettuce seeds with sand, reserving enough seeds for each student to have one to observe.
- › Prepare the garden bed where students will broadcast the seeds.
- › Fill watering cans to be ready for students to share. You can make your own watering cans by collecting clean, empty, quart-sized yogurt containers and poking or drilling several holes in the bottom.
- › Display the What a Plant Needs Poster.

ACTION STEPS

1. Discussing: Gather students in a circle. Give each student one of the reserved lettuce seeds. Ask them to close their eyes and squeeze their seeds until you tell them it's time to open their eyes. While their eyes are closed, place a head of lettuce in the center of the circle. Now tell them they can open their eyes to see what their seeds can make! Ask students what they think a plant needs to grow from a seed into a full-grown, food-producing plant. Consider singing "Sun, Soil, Water, Air" by the Banana Slug String Band to help them remember. Explain, *Today we're going to plant seeds outside, and we'll have to make sure we give our seeds all the things they need.* Review the What a Plant Needs Poster from Up, Up, Up We Grow! **(5 min.)**

2. Hunting or Tasting in Garden: Move to the garden if you're not already there. Gather students and ask, *Do we already have plants in our garden that are ready to eat? We're going to go on a hunt for something that we think is ready.* Remind students of expectations, including having permission before they pick. You can facilitate the hunt as a game such as hot and cold, or let students freely explore. If you don't have any crops currently growing in your school garden, divide your head of lettuce, and have a simple tasting where each student eats a leaf. This will help build anticipation for the lettuce they'll be planting. Tell students, *Leaves take in nutrients from the soil and energy from the sun. Nutrients help us to be healthy and energy helps us to be able to do things. This means that, when we eat leaves, we are getting nutrients and energy to make us glow with health!* Have students look down

and thank the soil, and look up and thank the sun (being careful not to look directly at it). **(10 min.)**

3. Demonstrate Sowing Seeds: Show students that you've mixed the tiny lettuce seeds with sand. Demonstrate taking just a handful and sprinkling it over a patch of the garden bed. Say, *Watch how I spread the seeds gently. And I'm looking to see where my friends are, so I'm not getting any on them.* Ask students to place one of their hands on their hip. Explain that one way to know they're being careful when they sprinkle their seeds is to make sure their hand doesn't go higher than their hip. Then show students how you water your seeds. **(5 min.)**

4. Planting a Lettuce Bed: Have each student take a handful of the seed/sand mixture and stand around the garden bed. You can have two students at a time sprinkle their seeds, or have a countdown where the group does it all together. Then let students use watering cans to water their seeds. You might have them count or say a quick chant to limit the amount of water each student can pour. **(10 min.)**

5. Drawing: In the garden or in the classroom, have students draw a picture of the lettuce bed they just created. Ask them to include all the things the plant needs to grow. They may also include themselves and their family eating lettuce. Alternatively, you can provide students with wide plant tags and have them draw something the plants need, such as a water drop or some sunshine, on each one. Have them stick their tags in the garden bed next to their seeds. **(10 min.)**

SIMPLE KID-FRIENDLY DRESSING

3 parts olive oil
1 part rice vinegar
1/2 part honey
Salt to taste

Shake ingredients in a lidded jar until dressing is emulsified.

REFLECTION

Have students discuss the following questions in small groups, then share with the class: **(5 min.)**

Social and emotional learning

- *How did we practice being safe in the garden today?*

Check for understanding

- *What's growing in our garden right now?*
- *What will our plants need to grow?*

ADAPTATIONS

Follow-Up: Bring students out to the garden to thin the lettuce bed by having pairs of students harvest small plants. You can then prepare a simple salad with the harvested greens and a homemade vinaigrette.

ACADEMIC CONNECTIONS

Next Generation Science Standards

NGSS K.LS1.C.

All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.