



GRADE 1

Farm to School Lesson

Topic: Healthy Soil—Plant Life Cycle
(suggested month: **October**)

Monthly Essential Question: What do plants need to grow?

Content Areas Addressed: Agriculture, Science

Standards Addressed:

- Participate in collaborative conversations with diverse partners about *grade 1 topics and texts* with peers and adults in small and larger groups. (CCSS.ELA-LITERACY.SL.1.1a,c)
- Ask and answer questions about key details in a text read aloud or information presented orally or through other media. (CCSS.ELA-LITERACY.SL.1.2)
- Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood. (CCSS.ELA-LITERACY.SL.1.3)
- Retell stories, including key details, and demonstrate understanding of their central message or lesson. (CCSS.ELA-LITERACY.RL.1.2)

Key Terms: Oxygen Air
Soil Sun

Materials Needed: Healthy Soil PowerPoint
Sampling food and supplies

Introduction: (5 min) *Introduce the essential question—What do plants need to grow? Ask students to share their initial thoughts with the class and record answers. “Today we are going to be discussing four of the most important factors for plants to grow— sun, soil, water, air.”

Development: (20 min) Watch “How do Plants Grow?” video. <http://viewpure.com/xldSRWtNMXE?start=0&end=0>
Have a few students share their favorite part of the story and why with the class. Go through the Four Things Plants Need slides while the students pretend to be tomato plants. “There are four important things that plants need to grow. We are going to pretend we are tomato plants and go through each one, so let’s have everyone stand up. The sun is important because it is used as food for the plant. The leaves collect the sunlight and use it for energy, like our bodies use food. Let’s pretend our hands are leaves, raise them above your head to capture the sunlight. The second thing plants need is soil. The roots of the plants help the plant get nutrients, which is another form of plant food, from the soil, to help them grow. Now pretend your feet are the roots, wiggle your toes to get the nutrients. The third thing plants need is water. The roots drink the water from the soil to help them get more nutrients (plant food). Wiggle your toes again to drink the water. Finally plants need air. Plants need to breathe like we do. But they do it the opposite way. Does anyone know what oxygen is? (part of the air that humans need so our bodies can work). Humans breathe in oxygen, and plants breathe out oxygen. Now practice breathing in and out

Sampling & Closure: (5 min) Conduct local fruit or veggie tasting. Instruct each student to take a ‘polite bite’ (eat at least one bite and only say polite things). “Even though it may not look like plants are doing a lot they are using the sun, soil, water and air to have energy to grow big and strong. Strong plants produce the oxygen we breathe in, and many of them are healthy for us to eat too.”