

Focus on: Planting Seeds and Growing Plants

This lesson is meant to support the unit on Ecosystems after students have planted seeds in cups. Although it may be tempting to skip planting seeds in cups if you are planting seeds in a garden, don't. Students who learn how to care for plants in a school garden are more likely to succeed in growing plants at their house. Taking their plants home that they planted in the cups may be their only opportunity to do that. Talk to your garden coordinator about the possibility of planting seeds in the garden, if it is not possible, your students can still adopt a plant to document its growth. Ask your garden coordinator if your class can take care of those plants over the next few weeks.

Clarifying Objectives:

1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.

1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.

1.L.1.3 Summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there. (e.g., reuse or recycle products to avoid littering)

1.L.2.1 Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth.

Key Vocabulary:

Definitions can be found at <http://learnersdictionary.com>

- Plants
- Animals
- Air
- Water
- Light
- Space
- Food
- Shelter
- Environment
- Needs
- Summarize
- Protect
- Improve
- Conditions
- Growth
- Reuse
- Recycle
- Littering
- Nutrients
- Light
- Energy
- Growth

Focus Question(s):

What do seeds/plants need to grow?

Materials:

- School Garden
- Science Notebooks
- Plant markers or popsicle sticks with the first names of students written on them.
- Tubs of Unifix Cubes

Activities:

1. If you are able to plant seeds in the school garden, take the class to the garden to plant the seeds. If not, take the class to the garden so they can each select their own plant. (If all students select the same kind of plant or perhaps just a few different ones, it will be easier to research to find out what the plant(s) specifically need when caring for them.
2. Once the seeds are planted or plants are selected, have students write their names on a plant marker or popsicle stick and put it in the ground near their plant.
3. Have students sketch their plant. Tell them to include as many details as possible.
4. Have students use Unifix Cubes and measure the height of their plant. They should include the measurement in their science notebook.
5. Have students write what the plant needs.
6. Have students make a plan for caring for the plant.
7. Discuss
8. Over the next several weeks, visit the garden at least once a week.
9. Have students care for their plant, measure it, and record information about its needs and growth.
10. Caring for the plant may include, weeding around it, watering it, placing mulch around it and perhaps removing pests from its leaves. (Before removing an insect, make sure it is a pest and not a beneficial insects. Lots of bugs in the garden are good bugs!)

Guiding Questions:

- Did your plant grow?
- How did it grow?
- How did it change?
- Did it grow fast or slow?
- What did the plant need?
- How did caring for the plant make a difference in the growth of the plant?
- What if no one had cared for the plant? What would have happened?
- How is your plant different now than it was a few weeks ago?