

## Focus on: Cops and Robbers (Needs of Plants)

This lesson is meant to support the unit on Ecosystems. It should be completed after students have learned the basic needs of plants.

### 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 plants need to grow? How can humans improve the conditions for growth of the plants?

### Materials:

- School Garden
- Garden Gloves to protect hands while weeding

- Buckets to collect the weeds
- Hand tools may be needed to pull the weeds, but they may be able to be pulled by hand as well.

### Activities:

1. Review the needs of plants with the class.
2. Show the following “Needs of Plant” video/song to the class. Get them to repeat the verses.  
<https://www.youtube.com/watch?v=dUBIQ1fTRzI>
3. Review that if plants get what they need, they will grow.
4. Ask: *Do we want all of the plants in the garden to grow? What is an example of a plant we do not want to grow? (weeds) Why don't we want weeds to grow? (They steal water and nutrients/food from the plants we want to grow. If the weeds get tall enough, they also steal the sunlight.)*
5. Tell the class we are going to play, “Cops and Robbers.” The students are going to get to be the police. They are going to capture the robbers and put them in jail. You see, when the weeds “steal” water, nutrients and sunlight from the plants, they “rob” the plants of their water, nutrients and sunlight. We can't let them do that!! Let's get those robbers away from the plants.
6. Have the class pull weeds. Make sure they know the difference between the plant that is supposed to be in the garden and the weeds.
7. Discuss the Guiding Questions.

### Guiding Questions:

- What does the plant need to grow?
- What do the weeds need?
- What can we do to help the plant grow? (Get rid of the weeds.)
- What will happen to the weeds if we take them out of the soil?
- Once we remove the weeds from the garden, what will they no longer have that they need?
- How can people improve the conditions for the growth of the plant?