



Roles of Plants

Objectives

Students will learn the different roles that plants play within an ecosystem and practice noticing these roles.

Background

Plants have many roles within their environment. The most commonly known role is their use as food but they have more to offer. Plants just as often used for shelter by animals in their habitat. Squirrels and birds use plants to build their nests in trees. Deer use shrubs and high grass to sleep in and hide their young. Plants store water for their own use and can be a water source for animals when not near a body of water. They provide shade and control temperature (climate) in a habitat. Environments with lots of trees are cooler than those without, such as a forest versus a desert. Plants also provide the air that animals (including us humans!) need to live.

Activity

- 1) After spending time introducing you students to the different roles a plant can have, look through the images on page 2 and review what role the plant is playing in each one. Some of these plants may be serving more than one purpose at a time, so challenge your students to think of as many as they can. Are there any roles that plants serve that we can't actually see? (air, control temperature, provide water)
- 2) Have the students use any art supplies you have available to draw a scene where plants are playing different roles. They can be as detailed as they want but make sure they are clear on what roles they are including in their scene. Challenge them to think of and include at least 4 roles but the more the better!
- 3) Have them share their image with the group and discuss what roles they chose or play a game where the other students have to guess what roles were included in the image.
- 4) Go outside or to your local park (or even just to a window) and observe the roles that plants are serving in your area. For more advanced students, you can touch on more abstract concepts like erosion and pulling carbon dioxide from the air (climate change).

Age Group

Grades 3-5

Duration

15 mins

Materials Needed

Art Supplies and Paper

Location

Indoors

Grade Standards

3 = Ecosystems;
Structures and
Functions of Living
Organisms

4 = Ecosystems

5 = Ecosystems,
Structures and
Functions of Living
Organisms

For more advanced students, introduce them to pollination, photosynthesis and the food web to further discuss plant roles in more depth and to learn some new vocabulary!

