

Penny Plant's Forest Ecosystem

Essential Question(s):

What is an ecosystem?

What services does an ecosystem provide?

At a Glance: Learners gain a deeper understanding of the eco-services provided by a healthy ecosystem with a fun word game and by putting themselves in the place of a plant to complete a writing exercise.

Background Information: This activity reinforces knowledge gained from the previous activity, Penny Plant's Place. An ecosystem is the life-supporting web among the living and non-living parts of an environment. It provides many useful eco-services. Eco-services include:

- Air cleaning and oxygen production from the trees and other plants.
- Food supply for consumers.
- Recycling and soil production by decomposers to remove dead organic material.
- Soil erosion protection by the roots of the trees.
- Climate control by the many trees and plants.
- Pollination by the many different pollinators.
- Genetic diversity maintained by the biodiversity of the ecosystem.
- Water purification maintained by the trees, soil, and rocks with the help of small organisms and microorganisms.

Procedure:

PART A – Penny Plant's Forest Ecosystem Word Scramble

1. Discuss the definition of an ecosystem. Ask the students what services the ecosystem provides to keep everything healthy, e.g., how do we get new plants? Where do all the dead bodies go? How do we get more soil? Where does the oxygen come from? What do the animals eat?
2. Give the students each a 'Penny Plant's Forest Ecosystem' worksheet.
3. Tell the students to read the description and try to unscramble the word, which is an eco-service provided by the forest.
4. Go over the answers with the students.

PART B – Needed: A Home

1. Have students work with a partner on this activity. Distribute the worksheets, 'Needed: A Home!'.
2. Review student answers.

Discussion/Assessment:

What eco-services does the forest ecosystem provide?

What would happen if one of these eco-services stopped functioning?

Do you have these eco-services on your school site?

Location: Indoors

Objectives: Learners will:

- 1) identify important eco-services provided by ecosystems.

Skills: analysis, comprehension

Supplies:

- Penny Plant's Forest Ecosystem Worksheet and Answers

Subjects: science, language arts

Time: 15 minutes

Insert Penny Plant's Forest Ecosystem worksheet