

Welcome to the Soil Department! *PowerPoint*

Essential Questions:

What is the Garden Earth Soil Department?

What organisms work in the Soil Department?

At a Glance: Key concepts and ecoservice workers for the soil production and maintenance module are introduced in a powerpoint.

Background Information:

See *Background Information: Soil Department*

Getting Ready:

Set up the equipment necessary for showing the PowerPoint presentation. Pull the soil eco-service worker cards listed in the 'Supplies' column. Explain that the Soil Department is one of many eco-service departments that make up every ecosystem on earth. Review the powerpoint script prior to your Club session.

Procedure:

1. Explain that the Soil Department is one of many eco-service departments that make up every ecosystem on earth. Many organisms live and work in this department. Show learners the soil eco-service worker cards. Briefly introduce the worker and his role in the soil department. Explain that we will be learning more about these soil workers in this module. Ask children if they have seen any of these creatures at their club site. What job do these animals do? Address the fact that some people are afraid of certain insects, but that we will be learning how they are important and most are not harmful.
2. Present the PowerPoint presentation. It introduces the major concepts of the Soil Department as follows:
 - Physical and biological processes are responsible for soil formation.
 - Soils are not considered a renewable resource.
 - Soils are complex materials, containing both organic and inorganic components.
 - Human activities can negatively affect water and soil conditions.
 - Earthworms and decomposer insects are important soil producers.

Discussion/Assessment:

After viewing the powerpoint, distribute the eco-service worker cards to students or groups of students. Have the students read the back of the cards and choose two facts to share with the group.

Questions:

- What is the Soil Department?
- What does the Soil Department do?
- What are some of the soil organisms or workers in the Soil Department?
- What have we learned about these workers and the jobs they do on Garden Earth?

Location: Indoors

Objectives: *Learners will*

- 1) display curiosity about the major concepts related to the Soil Department
- 2) describe the job of 3 soil workers.

Skills: communication, listening, analysis

Supplies:

- PowerPoint on CD
- LCD projector
- Monitor

Eco-service Worker Cards

- Blow Fly
- Carpenter Ant
- Fire Ant
- Carrion Beetle
- Cockroach
- Darkling Beetle
- Dung Beetle
- Fungus
- Termite
- Daddy Longlegs
- Earthworm
- Millepede
- Pillbug
- Land Slug
- Land Snail

Subjects: language arts, science

Time: 20 minutes

- What would Garden Earth be like without these helpers?
- What threats face this Department?
- Where can we explore the soil department on our site?

