

Welcome to the Air Cleaning Department! *PowerPoint*

Essential Question:

What is the Garden Earth Air Cleaning Department?

At a Glance:

Learners will examine the major concepts related to the Air Cleaning Department by watching an introductory PowerPoint presentation with questions that follow.

Background Information:

See *Background Information: Air Cleaning Department*

Getting Ready:

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

Procedure:

1. Explain that the Air Cleaning 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 Air Cleaning eco-service worker cards. Briefly introduce the worker on each card. Explain that we will be learning more about these Air Cleaning workers in this module. Ask learners if they have seen any of them at our club site. What job do these plants do?
2. Show the PowerPoint presentation. It introduces the major concepts of the Air Cleaning Department as follows:
 - Trees provide many things for humans and other organisms.
 - Plants act as air filters, cleaning the air of harmful chemicals and particulates. This service is a byproduct of photosynthesis.
 - Man-made pollutants, caused by the energy demands of modern industrial society (automobiles, power plants), currently equal or exceed the amount of natural pollutants entering the atmosphere from all other sources
 - The Air Department can rid the air of many pollutants, but an increase in pollutants and deforestation make it difficult for this Department to accomplish its work.
3. (AT SLIDE 9) Guided imagery: Everyone stand up and hold your arms out like the limbs of a tree. Close your eyes and imagine yourself as a tree. Take a deep breath in, then out. Take a moment to thank trees and other plants for their gifts to us (such as oxygen, food, wood, etc).

Discussion/Assessment:

What is the Air Cleaning Department?

Location: Indoors

Objectives: *Learners will:*

- 1) display curiosity about the major concepts related to the Air Cleaning Department.
- 2) name several plants that clean the air.

Skills: communication, listening, analysis

Supplies:

- PowerPoint on CD
- LDC projector
- Monitor

Eco-service Worker Cards

- Eastern Red Cedar
- Eastern Dogwood
- Red Maple
- White Oak
- Northern Red Oak
- Southern Red Oak
- Loblolly Pine
- Longleaf Pine
- Shortleaf Pine
- Slash Pine
- River Birch
- Shagbark Hickory
- Southern Magnolia
- Sweetgum
- Tulip Poplar
- American Holly
- American Hornbeam
- Boxelder
- Eastern Redbud

Subjects: language arts, science

Time: 20 minutes

How does our school site affect the Air Cleaning Department?
What threats face the Air Cleaning Department?