

Power Lines

Electricity All Around Us
Activity
Grade Level: 5-8



Main Objectives

Learners will recognize the potential dangers involved with power lines. They will illustrate how electricity gets to their home and discuss safety concerns associated with electrical currents in their home or community.

Learning Outcomes

By the end of this activity, learners will:

- Illustrate the transmission and distribution of electricity.
- Understand the safety issues around their home.

Length of Activity

1.5 hours

Materials List

Internet-enabled device
Power Lines Backgrounder
Power Lines Learner Worksheet

Procedure

Step 1:

- a. As a class or individually, review the Power Lines Backgrounder.

Step 2:

- a. After learners have read the background information, have them illustrate the concepts and complete the associated questions in the Power Lines Learner Worksheet.

Discussion Questions

- What are some good conductors of electricity?
- Can the human body conduct electricity?
- What are some good insulators and why are insulators important for safety?
- Discuss why birds do not get electrocuted when they perch on the power lines.
- What type of distribution lines or service lines do you have around your home?
- What safety issues are involved in bringing electricity to your home and community?
- What are some other ways of providing a home with electricity without having service lines connected to the home?
- How can renewable energy such as that provided by solar panels be used to generate power for a home?