



LIGHT, HEAT AND ELECTRICITY

Grade 4 | 60 Minutes

Program Overview

Description

In this hands-on field trip students will get to explore light, heat, and electricity. Build your own circuits, experiment with heat and ice, and see how light can make things move.

Adult chaperones recommended: 6

Content Standards

Subject	Gr	Ohio Department of Education Standards
Physical Science	4	<ul style="list-style-type: none">• Energy transfers from hot objects to cold objects as heat, resulting in a temperature change.• Electric circuits require a complete loop of conducting materials through which an electrical energy can be transferred.• Electrical energy in circuits can be transformed to other forms of energy, including light, heat, sound and motion.• Electricity and magnetism are closely related.

Vocabulary

insulator	light
conductor	heat
circuit	electricity

Books we recommend

Can You Feel the Force? By Richard Hammond. DK Publishing, 2006.

Post-Trip Activities

- Have students draw a circuit map of the lights in their classroom.
- Discuss how energy converts to heat, causing the warming of devices such as phones and computers.

Other Resources:

What is a circuit video: <https://study.com/academy/lesson/parts-of-a-circuit-lesson-for-kids.html>

Conductors and insulators music video: https://youtu.be/w7ScS7_5Yuk