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Flashlights and Batteries

[Download Full Lesson Plan](#)
(Full teacher resource documents are included)

Lesson Focus
Lesson focuses on the concept of electron flow through the demonstration of electrical circuits in a flashlight, and how batteries operate.

Lesson Synopsis
The Flashlights and Batteries activity explores how a flashlight works, showing the electric circuit and switch functions of this everyday household item. Students learn how batteries work, how they provide power to the simple circuit within the battery, and how the switch controls the flow of electrons. Students disassemble a flashlight, and draw a schematic of a flashlight's circuit design.

Age Levels: 8-11

Objectives

- Learn how switches control the flow of electricity.
- Learn to draw basic electric schematic diagrams.
- Learn how the electric circuit and battery within a flashlight operates.
- Learn about teamwork and working in groups.

Anticipated Learner Outcomes

As a result of this activity, students should develop an understanding of:

- batteries
- switches



- circuits and current
 - basic electrical schematic diagrams
 - teamwork
-

Lesson Activities

Students learn how batteries work, and explore the simple circuit system found in a standard flashlight. Topics examined include batteries, electron flow, switches, and bulbs. Students disassemble a flashlight and also document their findings by creating schematics of flashlight electric circuits.

Resources/Materials

- Teacher Resource Documents (attached)
- Student Worksheets (attached)
- Student Resource Sheets (attached)

Alignment to Curriculum Frameworks

Curriculum alignment sheet is included in [PDE](#).

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