

Physical Science: Electricity

Introduction

Students encounter electricity every day of their lives. A basic understanding of how electricity works can help students recognize the need for safe practices when around electricity, begin to realize that they have control over how much electricity they use in the home and at school, and begin to understand the impact energy consumption has on resources used to generate electricity.

Focus and Context

There is a dual focus in this unit, inquiry and problem solving. Students should be encouraged to investigate which materials conduct electricity, and compare a variety of circuit pathways. From this, they should be able to design solutions to electrical problems by completing various circuit pathways.

The context for this topic should be on electrical systems. Our society's reliance on electricity is pervasive; one need only think about the implications of an extended blackout to realize the extent to which our society depends on electricity. Electrical appliances, houses, small towns, and large cities use and depend on electricity to function.

Gr. 6-8 Science

303-30 identify and explain different factors that could lead to a decrease in electrical energy consumption in the home and at school