

Electricity

No matter where you live, transmission lines like the ones in this photograph are probably a familiar sight. They connect homes and communities across British Columbia into huge electrical systems. But what is happening inside these lines? What is electricity, and how does it travel from place to place? How does electricity get into these wires in the first place? These are some of the questions you will answer in this unit on electricity.

You might think electricity is a modern invention, but in fact electricity has always been with us. However, it is just within the last few hundred years that we have learned to harness it for our use. In this unit you will learn how this powerful natural force can be safely captured and controlled. You will examine different kinds of electricity, and see how each can be put to work in objects and systems that are used today.

Over the course of the unit you will find out what electricity can do for you, and what you can do to respect the electricity you use. You will learn how to stay safe around electricity at school, at home, and outdoors. You will also find out how the choices you make will help your household and community generate and use electricity responsibly, now and in the future.



Unit Contents

Chapter 4
Electric Charges **4**

Chapter 5
Electricity
at Work **17**

Chapter 6
Power to You **30**

Getting Ready...

- How does electric energy build up and move around in ordinary objects?
- How does pressing a switch make a flashlight go on or off?
- What can you do to help make sure your home uses electricity safely and wisely?