

# Electricity

Grade 7

## Big Idea

The electromagnetic force produces both electricity and magnetism.

## Questions to support inquiry with students:

How is electricity produced?

What is the relationship between electricity and magnetism?

## Learning Standards: Content

- 1) electricity – generated in different ways with different environmental impacts
- 2) electricity – used to generate magnetism

## Content Elaborations

- 1) Ways of generating electricity include the use of wind, water, coal, geothermal and solar energy.
- 2) The force of electromagnetism causes both electricity and magnetism.

Magnets are used to generate electricity and electricity is used to generate magnets.

Students can construct a simple electromagnet using a wire and battery or create a current by moving a magnet is a coil of wire.

## Learning Standards: Curricular Competencies

connection to Critical and Creative Thinking (core competency)

### Applying and innovating

- ▶ Contribute to care for self, others, community, and world through personal or collaborative approaches
- ▶ Co-operatively design projects
- ▶ Transfer and apply learning to new situations
- ▶ Generate and introduce new or refined ideas when problem solving