

## Using Energy

### Vocabulary:

- energy                      the ability to cause motion or create change; i.e., do work
- conduction                moving heat energy between two things in contact
- convection                moving heat as matter moves
- radiation                  energy that is sent out in waves or rays
- transfer                    to move from one place to another
- electricity                transmitting energy by electric currents
- appliance                a thing that changes energy from one form to another
- energy-efficient        wasting less energy when used

### Comprehension Questions

1. Explain how conduction works using a pan of hot water.
2. What kind of energy do kitchen appliances need?
3. Explain how one kind of energy can be made into another.
4. In what way does the sun heat the earth?
5. How does a radiator heat a room?
6. Why do some cars waste more energy than other cars?
7. Name two ways you can save energy.

### Activities:

#### ❖ Poster Project:

Supplies Needed: scissors, glue, construction paper, poster board, markers, crayons, colored pencils, rulers, yarn, magazines (for cutting up)

- Break students into groups of three. Then have one student from each group draw an energy topic out of a hat. The selected term will be the topic of the poster the student groups will collaborate on and design together. The steps are as follows:
  - a.) Students select a poster the teacher provides.
  - b.) Student groups research their term and discuss how they will decorate it.
  - c.) After agreeing on the format, the students decorate their posters showing how energy works in our lives today.
  - d.) After the groups have completed their poster, they plan how they will present their energy report to the class as in an oral report format.
  - e.) The scoring rubric is based on creativity, accuracy of information and final presentation to the class.
  
- ❖ Students complete a chart that identifies the four types of energy introduced in the movie: heat energy, sun energy, chemical energy and light energy.

<b>TYPE OF ENERGY</b>	<b>DEFINITION</b>	<b>EXAMPLE</b>
HEAT		
ELECTRICAL		
LIGHT		
CHEMICAL		