

# Zap Traps

Grade

1

Topic: Energy  
Grade: 1  
Duration: 30 – 45 minutes

*Students look around the school, and at home with help of parents, to identify devices that consume energy.*

## **Curriculum Expectations**

- 1s48: Describe different uses of energy at home, at school, and in the community, and suggest ways in which energy can be conserved
- 1s51: Identify everyday uses of energy
- 1s57: Use appropriate vocabulary in describing their investigations, explorations, and observations
- 1s58: Record relevant observations, findings, and measurements using written language, drawings, concrete materials, and charts
- 1s60: Describe the different forms of energy used in a variety of everyday devices
- 1s61: Identify everyday devices that are controlled manually
- 1e42: Ask questions about their immediate environment and offer personal opinions
- 1m34: Pose and solve simple number problems orally
- 1m92: Collect, organize, and describe data using concrete materials and drawings
- 1m95: Conduct an inquiry using appropriate methods
- 1m100: Collect first-hand data by counting objects, conducting surveys, measuring, and performing simple experiments
- 1m101: Relate objects to number on a graph with one-to-one correspondence
- 1m104: Read and discuss data from graphs made with concrete materials and express understanding in a variety of informal ways (e.g., tell a story, draw a picture)

## **Background Information**

Energy is everywhere around us. Energy sources include the wind, sun, natural gas, oil, batteries, electricity and the foods we eat. Observing the energy forms we use makes it easier to find ways to conserve them.

## **Accountability**

School administrators, teachers and students will be aware of sources of energy in the school and at home. Students will become more aware of the control they have over power uses around them.

## **Teacher Notes**

1. Divide students into source groups: wind, sun, gas, oil, batteries, electricity and food.
2. Walk around the classroom and schoolyard to find things that are using their source of energy.
3. Create a chart as a class after the walk to list all the types of energy users each group saw for their source of energy.
4. Go through the chart and flag the users of energy that the students have control over

(lights, computers bicycles, calculators, photocopiers, etc.) and no control over (heat of classroom, clocks in school, etc.).

5. As a class, discuss what they can do to save energy in the things they have control over and who they should talk to about the sources of energy use they have no control over.

### ***Home Extension***

Do the same activity with parents. A list of energy sources found at school could be created to help students compare use at home and school. Discuss with parents what can be done to save electricity (turn out lights, computers and televisions) and what parents can do to help (turn down heat when no one is home, etc.)

### ***Lesson Comments***

What similarities did your students find at school and home?

What did they promise to help conserve energy with?

What creative solutions did they come up with?