

MODULE

Electricity

- Classify samples of electrical conductors and insulators using a voltage and ohm meter.
- Test material samples for electrical conductivity using an insulator conductor board.
- Demonstrate knowledge of electrical circuits by wiring series and parallel circuits on an educational instrument.
- Observe the strength and direction of magnetic lines of force.

SESSION FOCUS

- 1 Static Electricity
- 2 Electricity Basics
- 3 Series Circuits
- 4 Series and Parallel Circuits
- 5 Magnetism, Electromagnets
- 6 Measuring Voltage, Generating Electricity
- 7 Measuring Current, Measuring Resistance

Dear Parent,

As parents and teachers, we realize it can be hard to get a child to discuss what he or she is learning in school. We hope the information provided on this page will assist you in communicating with your child about what he or she is learning.

Your participation in the learning process is extremely important, as you are your child's best teacher.

For the next few days, your child will be learning about magnetism, motors, voltage, resistance, and measurement by completing the *Electricity* Module.

Words students will learn in this Module include:

- alternating current (AC)
- battery
- conductor
- current
- direct current (DC)
- electrons
- ground
- insulator
- motor
- ohm

Questions for Discussion

During the course of this Module, your child will be assessed on key concepts and activities. You might want to discuss these concepts and activities with your child. He or she will be asked to:

- Define and give an example of static electricity. (*Ions tend to try to neutralize themselves by repelling or attracting electrons. As ions attract and repel electrons, some electrons find themselves unattached or only loosely attached to atoms. This causes an imbalance of positive- and negative-charged particles. This imbalance is called static electricity. Lightning is a very large discharge of static electricity from an imbalance of electrons in the atmosphere.*)
- Define conductor as it relates to electricity. (*Electricity is able to flow through a conductor.*)
- Define insulator as it relates to electricity. (*An insulator resists the flow of electricity.*)

Student: \_\_\_\_\_

Parent: \_\_\_\_\_