

## **Chapter 2: Electricity and Magnetism**

Dear Parent:

## After completing this chapter, your child will know how electricity and magnetism are used.

Your child will also learn about static electricity and magnetism, how electric charges flow in a circuit, how electricity transfers energy, and how electricity and magnetism are transformed.



You may wish to do the following labs at home with your child. They are easy and fun!

## **Insulators** Look at objects at your desk and around your classroom. Think about what material each object is made of. Make a list of objects that are conductors and a list of objects that are insulators.

**Effect of Magnetism** Plan an investigation to test the magnetism of an object. In your notebook, write a well-defined question and a procedure. Select appropriate equipment or technology. Carry out your investigation. Record data and make labeled drawings. Use your results to answer your question and make an inference.

**Explore an Electromagnetic Field** Make a circuit powered by a battery. Leave the circuit open. Then put a compass near the coiled wire. Close the circuit, and record in your notebook what happens to the compass. Include a labeled drawing. Analyze and explain your results.

## **Vocabulary Smart Cards**

Your child will learn these vocabulary words:

circuit mo
conductor de
electrical mo
energy mo
electric current mo
electromagnet pa
energy ser
generator

insulator

magnetic
domain
magnetic field
magnetic pole
motor
parallel circuit
series circuit

Help your child make these words a part of his or her vocabulary by using them when you talk together about electricity and magnetism. You may wish to use your child's Vocabulary Smart Cards to play a memory game. Ask your child to use each word in a sentence.