

# HOME/SCHOOL CONNECTION

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## Investigation 4: Electromagnets

**Safety Note:** Ask an adult to help you with this activity. Be sure to follow safety rules about electricity. Just look, don't touch!

Home electricity is provided by the electric utility company in your community. One large wire brings the electricity into your home. The wire can come to your home from a power line strung on poles, or from a cable underground. Can you find where the main electricity wire comes to your home?

You might have several wires coming to your home. Which one is the electricity? The trick is to look for the electric meter. The main wire always comes to the electric meter first. Why is there a meter on the electric line?

The electricity next goes to a fuse box or circuit-breaker box. The electricity divides and goes to several locations in your home. Each fuse or circuit breaker is included in a different circuit. How many circuits are in your home?

Wires are hidden inside the walls of your home. We connect our electric lights and appliances to the electric power in the walls by plugging them into electric sockets. How do you think plugging a lamp into a socket completes a circuit to light the lamp? Draw a picture to show how you think it might work.