

Name \_\_\_\_\_

Date \_\_\_\_\_

## ELECTRICITY INSULATORS AND CONDUCTORS

Electricity travels in closed loops, or circuits. It must have a complete path from the power source through the wires and back. Some materials allow electricity to travel easily. These materials are called **conductors**. Other materials prevent, or resist, the flow of electricity. These materials are called **insulators**.

Before using the Energy Baton, hypothesize whether each material will be an insulator or conductor by circling the word. Using the Energy Baton, form a closed circuit with your group. Then test each material as part of the circuit to determine if it is an insulator or conductor. Record your results on the right side of the chart.

Hypothesis		Your Results
insulator or conductor	<b>straw</b>	insulator or conductor
insulator or conductor	<b>metal spoon</b>	insulator or conductor
insulator or conductor	<b>plastic spoon</b>	insulator or conductor
insulator or conductor	<b>fabric</b>	insulator or conductor
insulator or conductor	<b>paper</b>	insulator or conductor
insulator or conductor	<b>aluminum foil</b>	insulator or conductor
insulator or conductor	<b>wood chopstick</b>	insulator or conductor
insulator or conductor	<b>glass</b>	insulator or conductor
insulator or conductor	<b>rubber eraser</b>	insulator or conductor
insulator or conductor	<b>paper clip</b>	insulator or conductor
insulator or conductor	<b>water</b>	insulator or conductor

Are there any other items around your classroom you would like to test? Record your findings.

You are swimming on a hot summer day. A thunderstorm approaches and the lifeguards make everyone get out of the water. Describe why.

The electric utility department is working on an electric pole in your neighborhood. The workers wear rubber sleeves, gloves and boots. Describe why.