

## Electricity Tester

GLE 0607.12.2 Explain how simple electrical circuits can be used to determine which materials conduct electricity.

GLE 0607.Inq.1 Design and conduct open-ended scientific investigations.

GLE 0607.Inq.2 Use appropriate tools and techniques to gather, organize, analyze, and interpret data.

**electricity tester** ...adapted from **ELECTRICITY #32**  
by TOPS Learning Systems

**1.** Connect a bulb to a battery with a ribbon of aluminum foil.

**2.** Turn your bulb on and off by completing the circuit.

**3.** Place different test objects in between. Make a list of *conductors* and *insulators*.

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Construct the electricity tester as shown in the diagram.

Design a data table to record your observations.

Select a variety of materials to test.

Record the results in your data table.

Use your observations to classify each material as a conductor or insulator.

### Learn More Online

- Play a game:
  - Enter the following address in your web browser  
<http://mark.madscientist.ws/>
- Watch a video
  - Go to WatchKnow.org
  - Type in the search box Electricity and Circuits
  - Click Search
  - Click on the play button in the video window
  - Or enter the following address in your web browser  
<http://www.watchknow.org/Video.aspx?VideoID=4991&CategoryID=1764>