PGE

Project Zero

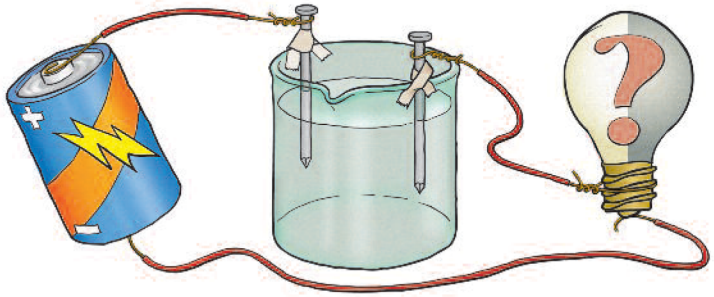
e-SMARTkids

EXPERIMENT

Electricity & Water

Print this page and try the experiment.

Ask an adult to help you with this experiment.



Materials:

- A circuit set up like the one shown in the illustration
- 1 Glass pint or quart jar
- 2 Nails
- 2 pieces of tape
- Salt
- Water

Teamwork:
Looking at the diagram above, do you think the bulb in this circuit will light? Discuss it first, and then set up the circuit. Have a teacher or another adult strip the insulation from the wires. Put plenty of salt in the water.

Write your observations here:

In this experiment, we added salt to the water to make the bulb light. When a source of electricity has higher voltage than your D-cell batteries, the electricity will travel through water with or without salt in it. So, if lightning struck a lake, or a blow dryer fell in the sink, electricity would travel through the water. Anyone touching that water could be electrocuted. (Electrocution means fatal contact with electricity.)

Going Further
Create a television spot or radio announcement that warns people about electrical hazards during storms and floods. You may target your announcement at children or adults. If it goes on the air, contact your local utility first to be sure it is accurate.