

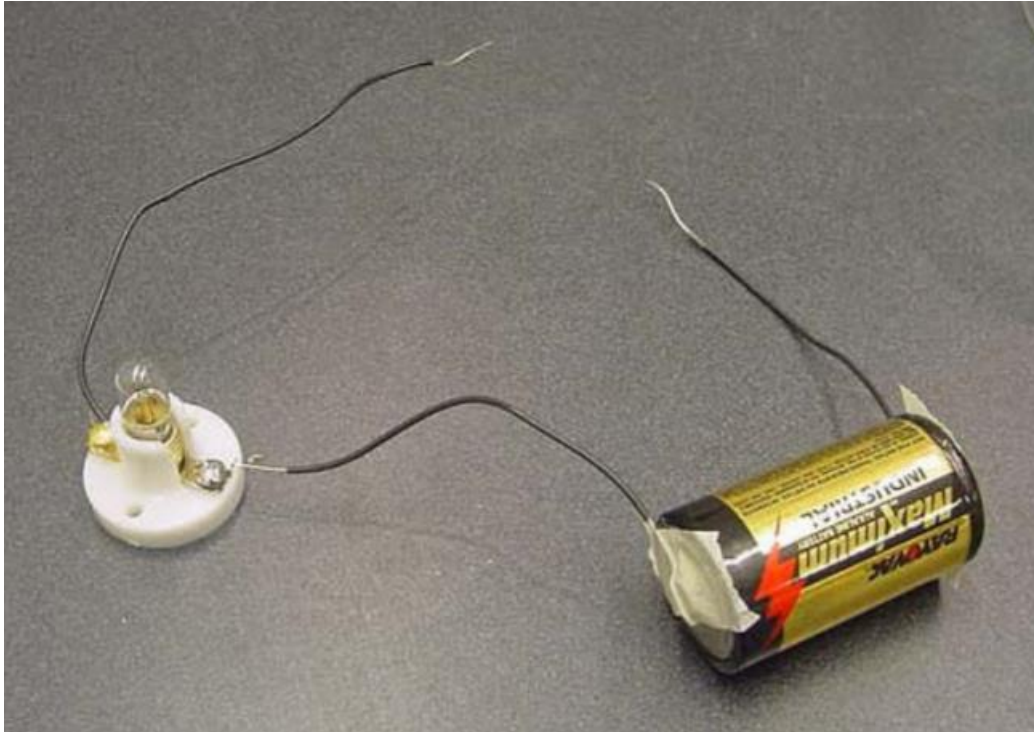
Name:

Date:

Class:

Will it Conduct? Worksheet Answers

1. In the space below, draw a picture of the conductivity tester.



2. What happened when you touched the free ends of the wires of the conductivity tester together?

The light bulb will light, because you have created a closed circuit.

3. How will you know if an object is a conductor or an insulator?

Conductor: The light bulb will light because the circuit is closed.
Insulator: The light bulb will not light because the circuit is open.

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- In the table below, list the objects you are testing in the left column. Predict whether each object is a conductor or an insulator by placing an X in the Prediction column for conductor if you think it is a conductor, or an X in the Prediction column for insulator if you think it is an insulator.
- Test each object to determine whether it is a conductor of electricity. Once you have determined whether it is a conductor or an insulator, place an X in the correct Test Results column.

Solid Object	Prediction		Test Results	
	Conductor	Insulator	Conductor	Insulator
Metal			X	
Wooden dowel				X
Cotton ball				X
String				X
Test tube				X
Rubber band				X

- What types of materials are good conductors?

Any type of metal.

- What are three examples of insulators?

A wooden dowel, a cotton ball, a test tube.

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8. How will you know whether a liquid conducts electricity?

If the liquid conducts electricity, the circuit will be closed and the light bulb will light up.

9. In the table below, list the liquids you are given to test. Predict whether each liquid will conduct electricity or not by placing an X in the Prediction conducts column if you think the liquid will conduct electricity, or an X in the Prediction does not conduct column if you think it will not conduct electricity.

10. Test the liquids given to you to determine if they conduct electricity. Once you have determined whether each liquid conducts electricity, place an X in the correct Test Results column.

Liquid	Prediction		Test Results	
	Conducts	Does Not Conduct	Conducts	Does Not Conduct
Sugar Water				X
Ammonia & water				X
Vinegar & water				X
Lemon juice & water				X
Salt & water (depends on the concentration)			X	X
Baking soda & water				X
Tap water			X	