

# Conductivity Testing Worksheet Answers

**1. What is a conductor?**

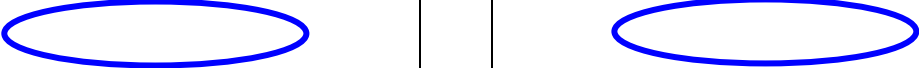
Objects or materials that allow the flow of electrons (electricity/electrical current).

**2. What is an insulator?**

Objects or materials that inhibit the flow of electrons (electricity/electrical current).

**3. In the table below, list the test items as either conductors and insulators:**

Conductors	Insulators
Aluminum foil Copper Salt water Anything metal	Glass Paper Plastic Rubber



**4. Circle the best conductor on the list and the best insulator on the list.**

**5. How do engineers use conductors in products and appliances?**

Engineers use conductors when designing anything that needs electricity to work. They need to use conductors to provide a path for the electricity to flow. Conductors, such as wires, keep electrical charge contained as it travels to the appliance.

**6. How do engineers use insulators in products and appliances?**

Engineers design products and appliances that are safe for us to use. They use insulators to keep electricity from touching and hurting the people who are using the products. Insulators also keep wires that are close to touching from passing electrical current between wires and changing the path of a circuit.