

Test the following objects to determine if they are **CONDUCTORS** or **INSULATORS**.

Apparatus:

Light bulb

Light bulb holder

Battery

Alligator clips

Rubber band

Items to be tested:

Penny

Styrofoam

Cork

Paper clip

Rubber

Aluminum foil

Toothpick

Method:

Step 1: Place the rubber band around the battery.

Step 2: Attach one alligator clip to each end of the battery.

Step 3: Screw the bulb into the light bulb holder.


Step 4: Connect the other ends of the alligator clips to the metal connections on the bulb holder and turn on the light.

Step 5: Add an extra alligator clip to the circuit.

Step 6: Insert the objects to be tested between the two open ends of the alligator clips. By doing this you are closing the loop again and completing the circuit. If the light lights up that means electrons are flowing and the object conducts electricity. If the object is an insulator and doesn't conduct electricity the light won't turn on.

Make sure however that the two alligator clips don't touch each other otherwise the light will light up and give you an incorrect reading for an object.

Record your results in the table below:



Item tested	Conductors or Insulators
Penny	
Styrofoam	
Cork	
Paper clip	
Rubber	
Aluminum foil	
Toothpick	

How about liquids?
Are they good conductors?