

## Activity 9

### Conductors and non-conductors of electricity

#### Materials:



#### Predict:

In the table on page 25, predict which objects are conductors of electricity and which are non-conductors of electricity.

#### Method:

- 1 Set up an electric circuit as shown below.



- 2 Connect the paper clip to the free ends of the wires. Turn the switch to the 'on' position and observe if the light bulb lights up.
- 3 Repeat Step 2 using the other objects.

**Results:**

4 Record your observations in the table below.

Object	Material: metal or non-metal?	Prediction: Will the light bulb light up? (✓) or (✗)	Observation: Does the light bulb light up? (✓) or (✗)	Conductor or non-conductor of electricity? (✓) or (✗)
Paperclip				
Toothpick				
Rubber band				
Key				
Screw				
Nail				
Wooden ruler				
Metal ruler				
Plastic spoon				

5 Based on your observations in this investigation, which material allows electricity to pass through it?

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6 What is the name given to an object that allows electricity to pass through it?

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7 Based on your observations in this investigation, which materials do not allow electricity to pass through them?

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8 What is the name given to an object that does not allow electricity to pass through it?

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