

Activity 9

Conductors and non-conductors of electricity

Materials:



dry cell



dry cell holder



light bulb



light bulb holder



insulated wires



switch



paperclip



toothpick



rubber band



key



screw



nail



wooden ruler



metal ruler



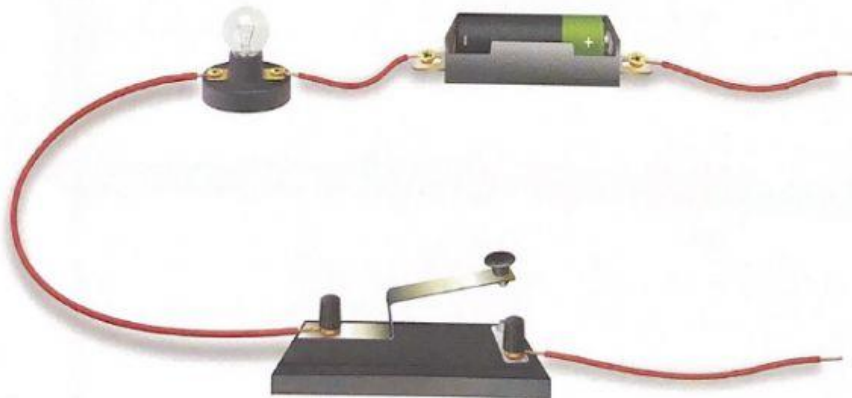
plastic spoon

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 (X)	Observation: Does the light bulb light up? (✓) or (X)	Conductor or non-conductor of electricity? (✓) or (X)
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?

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

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

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