Activity 9

Conductors and non-conductors of electricity

Materials:

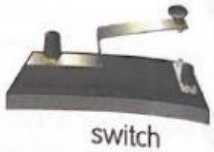

dry cell


dry cell holder


light bulb


light bulb holder


insulated wires


switch


paperclip

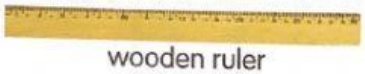

toothpick


rubber band


key


screw


nail


wooden ruler


metal ruler

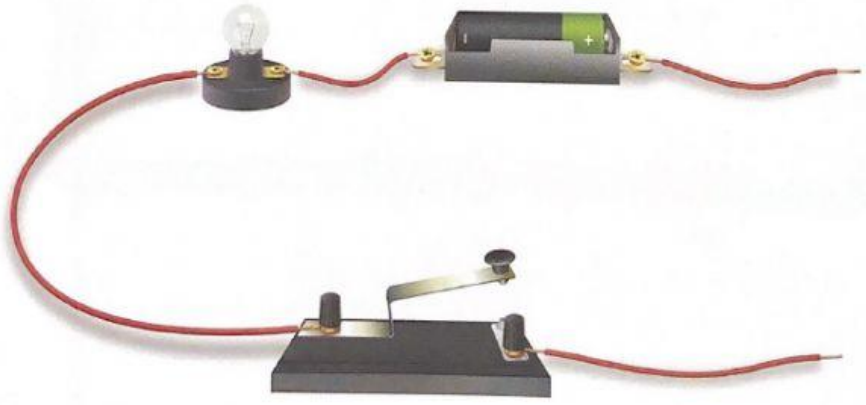

plastic spoon

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.

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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?

_____

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