Grade 6 Electricity and Circuits Worksheets

A. Fill in the Blanks:

1. A device that is used to break an electric circuit is called …….. .
2. An electric cell has …….. terminals.
3. …….. is a source of electricity..
4. An electric bulb has a …… that is connected to its terminals.
5. …… is the combination of two or more cells.

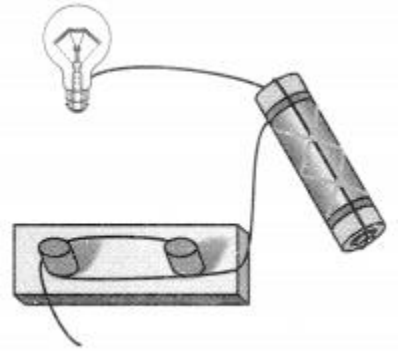
B. State True or False:

1. Electric current can flow through metals. ……..
2. Instead of metal wires, a jute string can be used to make a circuit. ……
3. Electric current can pass through a sheet of thermocol. ……
4. In an electric circuit source of electricity is bulb. ……..
5. Paper is a good conductor of electricity. ……..

C. Answer the following questions in short:

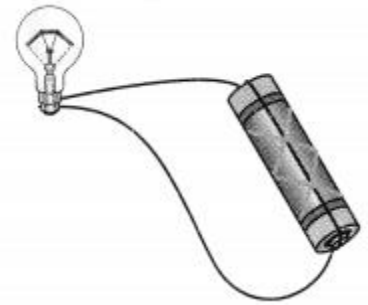
1. Explain why the bulb would not glow in the arrangement shown in Fig. 1.

2. Complete the drawing shown in Fig. 2 to indicate where the free ends of the two wires should be joined to make the bulb glow.



3. What is the purpose of using an electric switch? Name some electrical gadgets that have switches has built into them.
4. Would the bulb glow after completing the circuit shown in Fig. 2 if instead of

safety pin we use an eraser?
5. Would the bulb glow in the circuit shown in Fig. 3?



6. Using the ‘conductor tester’ on an object it was found that the bulb begins to glow. Is that object a conductor or an insulator? Explain.
7. Why should an electrician use rubber gloves while repairing an electric switch at your home? Explain.
8. The handles of the tools like screwdrivers and pliers used by electricians for repair work usually have plastics or rubber covers on them. Can you explain why?
9. Name two conductors and two insulators of electricity.
10. Give two uses of electricity at your home.
11. Describe a cell from the outside?
12. What is the difference between open and closed circuit?
13. Imagine there were no electric supply for a month. How would that affect your day to day activities and others in your family?
14. Is distilled water a conductor of electricity? Why?

D. Tick (✓) the Correct Option:
1. Which of the folk g is a conductor?
(a) Glass
(b) Steel
(c) Air
(d) Paper

2. The closed path in which the current flows is called
(a) current
(b) conductor
(c) circuit
(d) bulb

3. A filament is used in a:
(a) bulb
(b) battery

(c) cell
(d) switch

4. The insulating material on electric wires can be:
(a) aluminium
(b) copper
(c) enamel
(d) plastic

5. An ordinary cell has a:
(a) copper rod
(b) carbon rod
(c) zinc can
(d) plastic cap

E. Match the following:

'A'	'B'
1. Current	a. Converts chemical energy into electric energy
2. Conductor	b. Conductor
3. Insulator	c. Microwave oven
4. Wood	d. Flow of charge
5. Aluminium	e. Wrist watch
6. Cell	f. Electricity can pass through it
7. Button cell	g. Insulator
8. Electric appliance	h. Electricity cannot pass through it

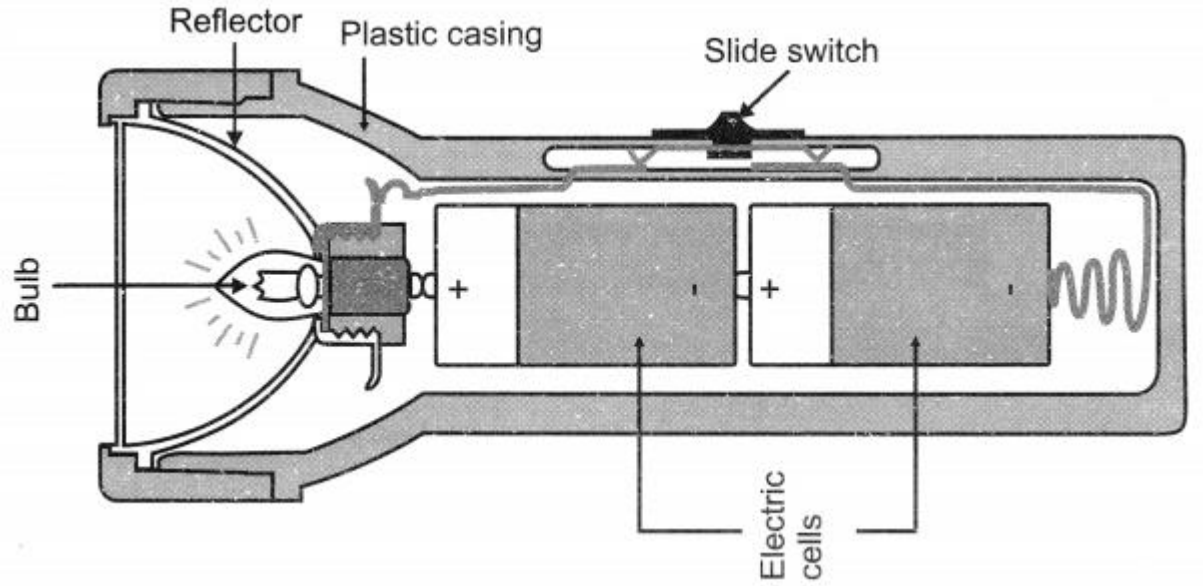
F. Think of six activities which use electric current. Also, name the devices used to perform the activity.

Example:

Activity you perform	Device
Get light	Torch

G. The inside of the torch has drawn in the fig. given below. When we close the switch, the circuit is completed and the bulb glows. Draw a red line on the figure indicating the complete circuit:

Inside view of a torch:



H. Fill in the blanks in the Table and add more examples to the list:

Object used in place of the switch	Material it is made of	Bulb glows? (Yes/No)
Key	Metal	Yes
Eraser	Rubber	No
Scale	Plastic	
Matchstick	Wood	
Glass bangle	Glass	
Iron nail	Metal	