



**INDIAN SCHOOL DARSAIT**  
**Class VII - Science**  
**Topic: Electric Current And Its Effects**

**Worksheet No :**  
**Resource person : Sujisha Sumith**  
**Date :**

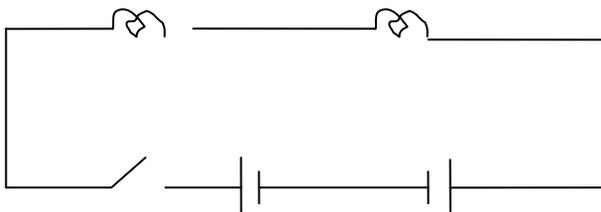
**Name of the student :**  
**Class : VII**

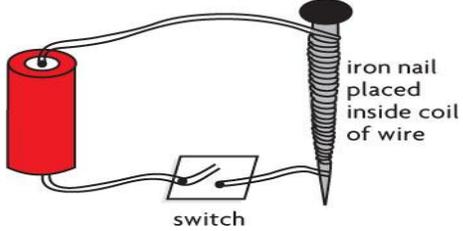
**One mark Questions**

1. Name the materials used for making:  
(i) Filament of an electric bulb (ii) heating element of an electric iron
2. Give any two advantages of electromagnets over permanent magnets.
3. Give three examples each for (a) conductors (b) insulators.
4. Point out any two methods through which we can increase the strength of an electromagnet.
5. Why is an electric fuse required in all electrical appliance?

**Two mark Questions**

6. **Fill in the blanks:**  
(a) Longer line in the symbol for a cell represents its ----- terminal.  
(b) The combination of two or more cells is called a -----.  
(c) A ----- is a switch that automatically get turns off when an excess current flows through the circuit  
(d) The safety device based on the heating effect of electric current is called a -----.
7. Riya and Rayan are alone at home. Riya is watching TV while Rayan is playing with his toy. The battery in his toy gets discharged. He decides to charge it and connect to the same socket where the TV is connected. The room heater in that room is also connected to that socket. After a few second, Riya sees a heavy spark near the socket. She immediately puts off the main switch and calls the neighbours for help.  
(a) What do you think is the reason for the heavy spark in the socket?  
(b) What do you learn from Riya's behavior?
8. The bulbs in the circuit shown below do not glow. Can you make necessary changes in the circuit to make the bulb glow?



9.	What are the factors on which amount of heat produced depends?
10.	<p>The picture given here shows you the working of an electromagnet .Study the picture and completes the sentences that follow.</p>  <p>In this figure a coil of wire is wound around an _____. When electric current is allowed to flow through the wire, the iron becomes _____. When the _____ is turned off, the iron nail loses its _____.</p>
11.	Why CFL are more preferred over incandescent lamp?
<b>Three mark questions</b>	
12.	Find some situations in our day to day life where heating effect of current result in wastage of energy.
13.	List some common uses of electromagnets.
14.	With the help of a labeled diagram explain magnetic effect produced by a current carrying conductor.
15.	Explain the construction and working of an electric bell.
16.	<p>Paheli took a wire of length 10 cm. Boojho took a wire of 5 cm of the same material and thickness. Both of them connected the wires as shown below. The current flowing in both the circuits is the same.</p> <p>(i) Will the heat produced in both the cases be equal? Explain.</p> <p>(ii) Will the heat produced be the same if the wires taken by them are of equal lengths but of different thickness?</p>  <p style="text-align: center;"><b>Fig. 14.4</b></p>



*Do you know what is common between an electric eel, a bolt of lightning, and a glowing bulb?*

