Name: _____ Date: _____

Electric Current and its Effects

Q1. Zubeda made an electric circuit using a cell holder shown in Fig., a switch and a bulb. When she put the switch in the 'ON' position, the bulb did not glow. Help Zubeda in identifying the possible defects in the circuit.

Ans. _____

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Q2. Write an experiment to show the magnetic effect of current.

Ans. _____

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Q1. Zubeda made an electric circuit using a cell holder shown in Fig., a switch and a bulb. When she put the switch in the 'ON' position, the bulb did not glow. Help Zubeda in identifying the possible defects in the circuit.

Ans. Possible defects

i. Rubber band used may not be tight enough to hold the metal strips tightly. It is necessary that the rubber bands hold the metal strips tightly.

ii. The two cells may not be connected properly. The negative terminal of one cell should be connected with the positive terminal of the other cell.

iii. The two cells may not be in proper contact. Current will not flow if circuit is not complete.

iv. The bulb may be fused. Fuse bulb do not complete the circuit. Hence bulb will not glow.

Q2. Write an experiment to show the magnetic effect of current.

Ans. Take the cardboard tray from inside a discarded matchbox. Wrap an electric wire a few times around the cardboard tray. Place a small compass needle inside it. Now connect the free ends of this wire to an electric cell through a switch. Now, move the switch to the 'ON' position. We will observe that compass needle gets deflected when the current flows in a nearby wire. So, when electric current passes through a wire, it behaves like a magnet. This is the magnetic effect of the electric current.