

Activity Number- 12

Electricity and Circuits

Class :VI

Subject: Science

Duration – 30 minutes

Nature of activity : Individual

Learning Outcome : Students will be able to

-**interpret** that electricity is a useful form of energy. It plays a very important role in our daily life.

- **device** simple circuits and **analyse** that when an electric current is passed through the filament of the bulb ,the filament becomes hot and emits light.

What I have to do ?To connect an electric bulb with electric cell in different ways and see in which case the bulb glows.

What I require ? An electric bulb, an electric cell , plastic coated copper wires, insulated plastic tape

What do I need to know ? Electric cells are a common source of electric energy for many equipments. Electric cells are used in transistors , calculators , wrist watches , remotes , toys , clocks , cameras , video games etc.

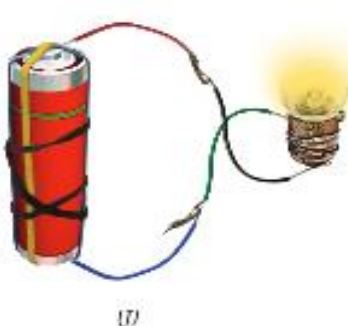
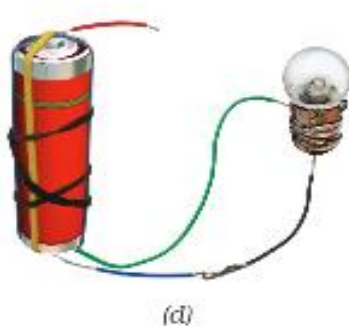
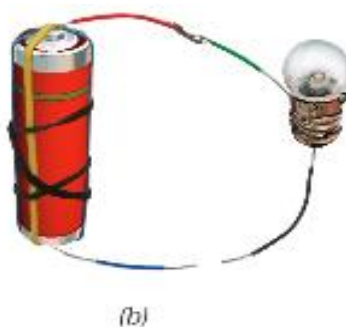
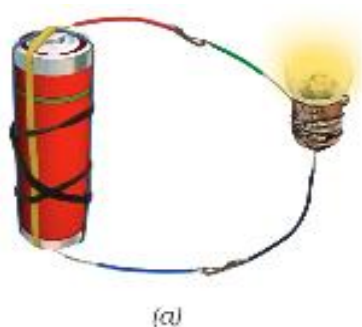
Teacher's Activity: Teacher will

- (1) ask students to take four lengths of electric wire with differently coloured plastic coverings.
- (2) remove a little of the plastic covering from each length of wire at the ends.

How will I proceed ?

Student's Activity : Students will

- (1) stick the wires to the bulb with the tape.
- (2) use rubber bands or tape to fix the wires to the cell.
- (3) now connect the wires fixed to the bulb in six different ways as shown in fig.



For each arrangement find out whether the bulb glows or not.

S.No	Arrangement	Does the bulb glow ?	Reason
1	A		
2	B		
3	C		
4	D		
5	E		
6	F		

What have I learnt ?

1. When there is complete path from one terminal of the cell to another terminal of the cell , then only the bulb will _____.

2. If a wire is broken , the bulb will not _____.

3. If both the wires are connected to one terminal only , then also , the bulb will not _____.

What I would be interested / curious about ?: What does the electric cell contain ?

Extended learning worksheet

I Fill in the blanks :

1. An electric _____ is a continuous path along which the current flows.
2. A circuit in which electricity does not flow is called an _____ circuit.
3. The source of electricity in an electric cell are the _____ stored in it.
4. Rubber is a good example of electric _____.
5. A device that is used to break or complete an electric circuit is called _____.
6. An electric cell has _____ terminals.
7. If the filament of a bulb breaks, it is said to be _____.
8. An electric current is _____ when no current flows through it.
9. Electric current flows from _____ terminal to _____ terminal of cell in the circuit.

II Give one word for the following statements :

1. The source of electricity _____
2. Thin wire in a bulb which gives out light _____
3. The arrangement of providing a complete path for electricity to pass between two terminals of the electric cell _____
4. Some times electric bulb does not glow even when electric switch is 'ON' then we say that bulb is _____