#### **Electric Circuits**

- 1. The battery provides the electricity.
- 2. Electricity flows from the battery along the wires to the bulb.
- 3. The bulb will not light up as electricity is unable to flow to it.
- 4. It will not light up. The circuit is broken.
- 5. It is the path along which electricity flows.
- It flows through the wires in a continuous path from the battery to the bulb.

## Switch on, Switch off

1. (4)

2. (3)

### Stronger current, Brighter light

When an electric current flows through the <u>filament</u> in a bulb, some of the electric energy is changed into <u>light</u> energy. The flow of the <u>current</u> is weaker when there is a bulb in a circuit. Adding more <u>bulbs</u> will further weaken the current flow. As a result, the filament in each bulb will not <u>glow</u> as brightly.

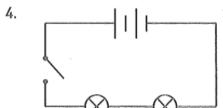
1. ✓

3. ✓

5. ✓

## Series or Parallel

- 1a. The bulbs are arranged in a series.
- 1b. The rest of the bulbs will not light up.
- 2a. The bulbs are arranged parallel to one another.
- 2b. The other bulbs will remain lighted.
- 3. The brightness of each bulb will decrease.



# **Conductors of Electricity**

- Plastic and tissue paper are non-conductors of electricity.
- 1b. They are known as insulators.
- 2a. Silver
- 2b. No. It is too expensive.
- 3. Pencil lead and lime juice.
- Many metals are good conductors of electricity. OR The better the conductor, the brighter the bulb will glow. OR Some non-metals can conduct electricity. (Choose any 2)
- We may get an electric shock because water is a good conductor of electricity.