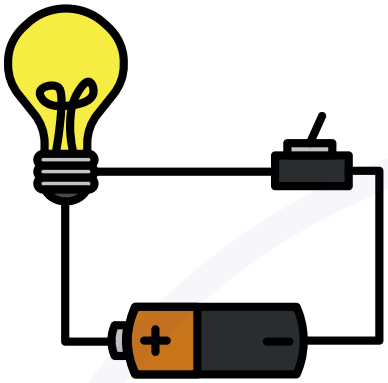
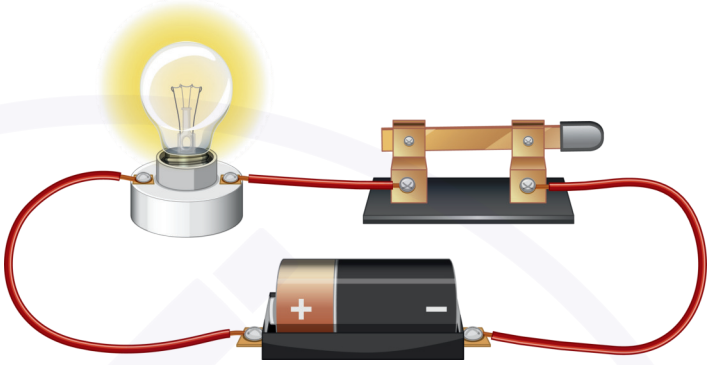
# ELECTRICITY AND CIRCUITS

## Key Concepts

- Electricity is the flow of electrical charge through a conductor.
- Circuits allow electrical energy to be transferred to devices.





## Key Facts to Remember

- Electric current is measured in amperes (A).
- Voltage (potential difference) is measured in volts (V).
- Resistance slows down the flow of current and is measured in ohms (Ω).
- A series circuit has one path for current; a parallel circuit has multiple paths.
- Conductors allow current to flow; insulators do not.
- Metals like copper are good conductors.
- The formula for voltage is $V = I \times R$.

## Quick Questions

1. What is the unit of current?
2. What is resistance measured in?
3. What is the difference between a series and parallel circuit?
4. Name a good conductor of electricity.
5. What is the formula for voltage?
6. What does a resistor do in a circuit?
7. What are insulators?
8. What is measured in volts?

### Fun Fact

**Lightning is a giant electrical spark that can reach temperatures five times hotter than the Sun!**