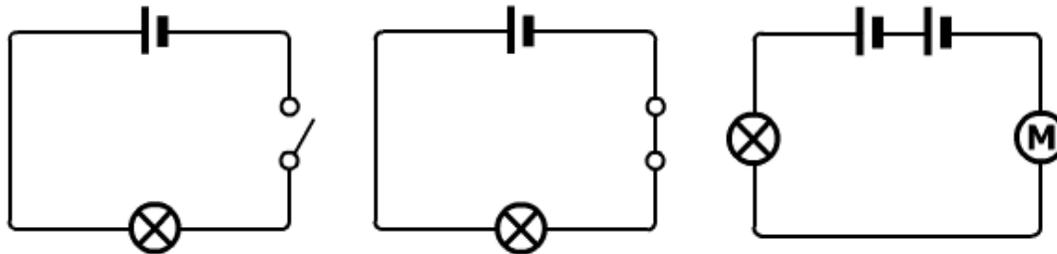
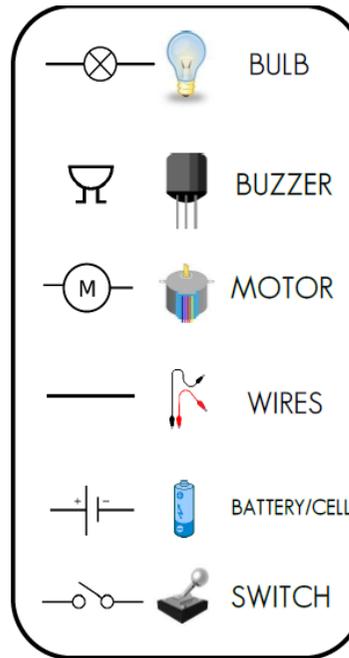


Electricity

Year 4 Knowledge Organiser

Key Skills

- Classify household objects that run/don't run on electricity
- Classify materials that are/are not conductors.
- Identify how electricity can be generated.
- Draw a labelled diagram of the components of a circuit.



Key facts

- **In a series circuit** all the components are joined together and the electricity can only flow in one direction .
- **A circuit will not work** if the cells aren't connected properly, a component isn't working, if there is a gap or one of the components acts as an insulator.
- **An electrical conductor** lets electricity pass through it. They are often metal (e.g. iron, copper and gold) but also include carbon and water .
- **An insulator** doesn't let electricity pass through it, e.g. wood, leather and plastic.

electricity

a form of energy that can be carried by wires and is used for heating and lighting, and to pro-

bulb

the glass part of an electric lamp, which gives out light when electricity passes through it.

battery

a container of one or more cells in which chemical energy is converted into electrical energy and used as a source of power.

buzzer

an electrical device that is used to make a buzzing sound .

cells

a cell is a single unit used for converting chemical or solar energy into electricity.

circuit

a complete route which an electric current can flow around.

switch

a small control for an electrical device which you use to turn the device on or off.

wires

a long thin piece of metal that is used to fasten things or to carry electric current.

motor

a device that uses electricity or fuel to produce movement.

conductors

a substance that heat or electricity can pass through or along.

insulators

a non-conductor of electricity or heat.

electrical appliances

an electrical device or machine in your home that you use to do a job such as cleaning or cooking.

mains

where the supply of water, electricity, or gas enters a building.

component

the parts that something is made of.

current

a flow of electricity through a wire or circuit.

energy

the power from sources such as electricity that makes machines work or provides heat.

