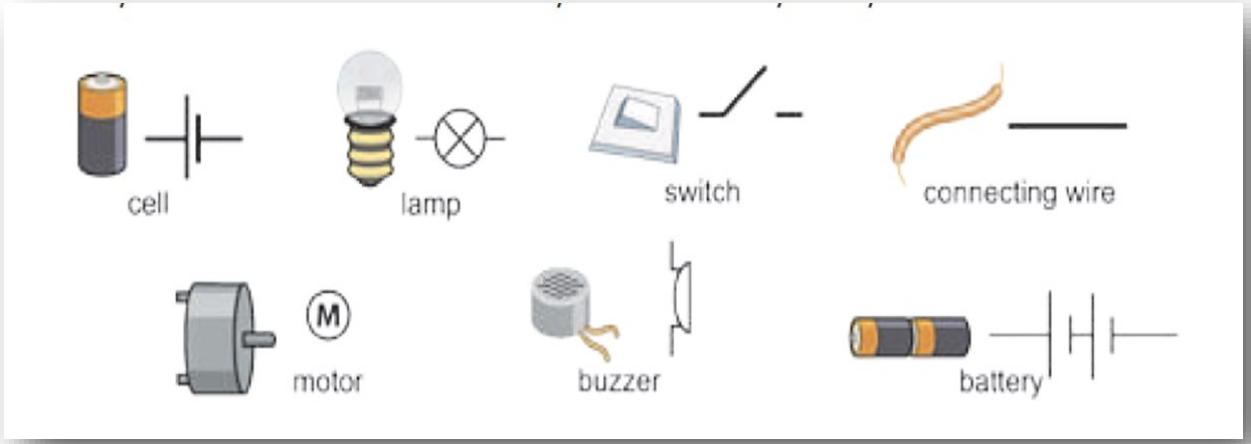
Year Six Science knowledge organiser– Electricity

Key vocabulary

Circuit	A path that an electrical current can flow through.
Voltage	The force that makes the electrical current move through the wires. The greater the voltage the more the current will flow.
Buzzer	An electrical device that signals by buzzing.
Motor	A machine that causes motion or power.
Amps	How an electrical current is measured
Cell/ battery	A device that stores energy as a chemical until it is needed. A cell is a single unit. A battery is a collection of cells.

Learn these common electrical symbols:



Resistors

Resistors restrict or limit the flow of current in a circuit. Resistance is how easily electricity can pass through a material in a circuit. Different materials have different levels of resistance and this can be used to change the resistance in a circuit and change the brightness of a bulb. Good conductors, e.g. metals have a low resistance, they allow electricity to move through more easily than, for example, plastic, which therefore has high electrical resistance.

Changing the length and the thickness of wire in a circuit will change the resistance. The thinner the wire the harder it is for electricity to move through, the thicker the wire the easier. The shorter the wire the less resistance, the longer the wire the greater the resistance.