

Electricity Knowledge Mat

Sticky Knowledge- What do I need to know?

Week 1	To widen knowledge of electricity and circuits.
Week 2	To be able to use recognised symbols when representing a circuit in a diagram.
Week 3	To investigate ways in which the brightness of a bulb is changed
Week 4	To plan, carry out and evaluate an experiment to see how changing the wires in a circuit affects the brightness of a bulb
Week 5	To create a simple device using a circuit

Component	Symbol	Purpose
Cell (Battery)		Provides electrical energy
Power supply		Alternative to using cells
Wire		Allows current to travel
Bulb/light		Converts electrical energy into heat and light
Motor		Converts electrical energy into movement energy
Buzzer		Converts electrical energy into sound energy
Switch		Allows circuit to be opened or closed

Key Vocabulary- What words do I need to know and understand?

conductor	Some materials let electricity pass through them easily. These materials are known as electrical conductors.
insulator	Plastic, wood, glass and rubber are good electrical insulators.
series circuit	A series circuit is one that has more than one resistor, but only one path through which the electricity flows.
cells	An electrical cell is a device that is used to generate electricity.
volts	Voltage is an electrical potential difference, the difference in electrical potential between two places.
fuses	These are safety devices. A fuse is a strip of wire that melts and breaks a circuit if it goes over a safe level.
generator	A machine that converts energy into electricity.
socket	A socket is a safe device to plug your electrical items into.
Thomas Edison	He was an inventor that came up with the way to make the light bulb to be accessible in homes, industry and outside on the streets.