

Year Group: 4
Autumn

Knowledge Organiser: Science

Theme: Electricity



Key learning

Understand how electrical circuits work.

Know why a bulb lights up or not in a circuit

Key knowledge that will be learnt:

Common electrical conductors are insulators

Metals are conductors of electricity

A switch opens and closes a circuit and this determines whether or not a lamp lights in a simple series circuit

Common appliances that run on electricity



Key Vocabulary:

word	definition
electricity	an energy that powers electrical items, e.g. kettles
cell	A device that is a source of electrical energy
circuit	A pathway that electricity flows around
Mains electricity	Supplied through wires to a building
conductor	Allows electricity to flow through it
insulator	Doesn't allow electricity to flow through

Electrical circuits and components.

Electricity flows around a circuit when the circuit is complete and when there are no breaks in the circuit



Cell 2 or more cells joined together are called a battery



Wires connect the components in a circuit



Bulb lights up in a complete circuit



Motor produces movement in a complete circuit



Switch turns components on or off



Buzzer makes a noise in a complete circuit

