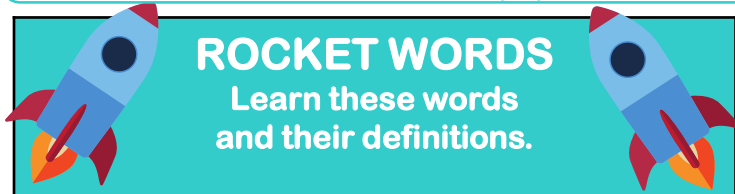


It is very important to be safe with electricity. Electricians are trained to be safe with electrical circuits and equipment.

## Knowledge Organiser Year 4 Unit: Electricity

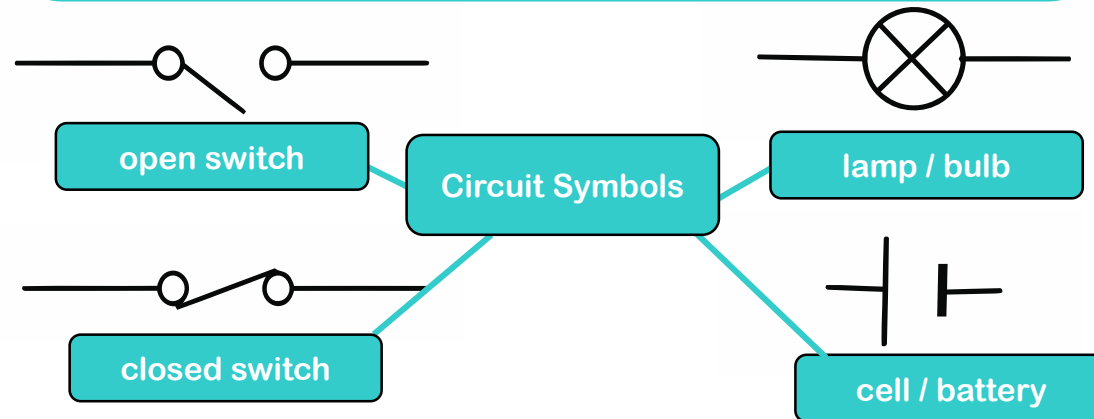
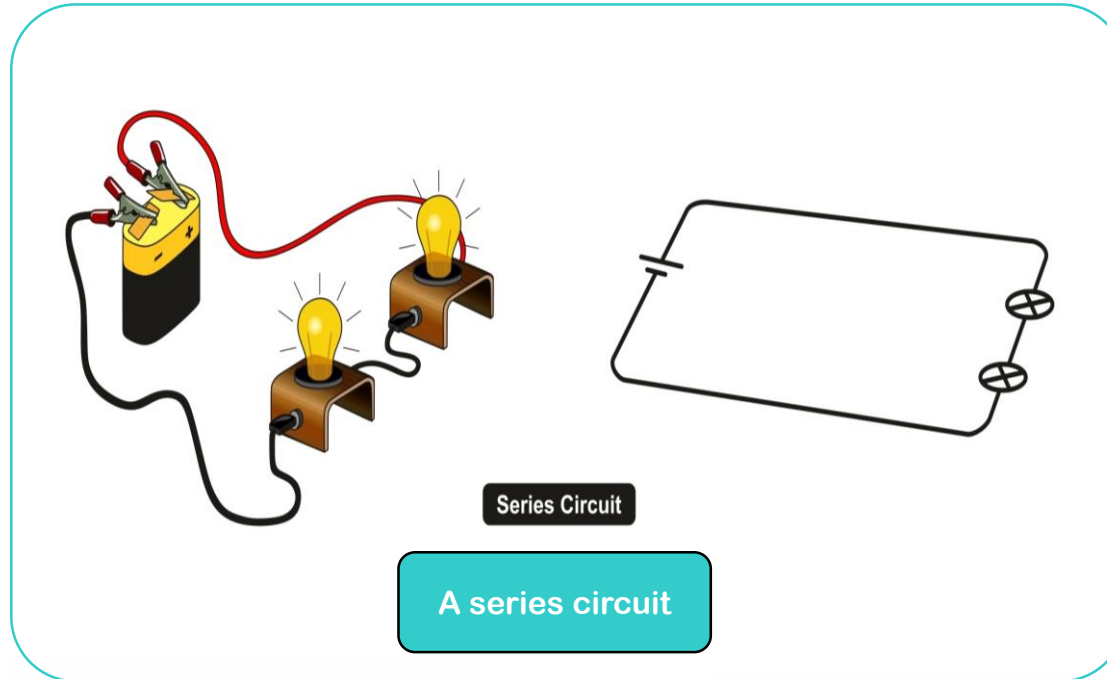
All metals are good conductors of electricity and materials like rubber are good insulators.



### ROCKET WORDS

Learn these words and their definitions.

Key Word	Definition
<b>series circuit</b>	A looped circuit where the electricity flows from the positive to negative terminal of the battery.
<b>circuit diagram</b>	Electrical components shown in a picture by using standard symbols.
<b>parallel circuit</b>	A circuit with two or more pathways for the current to flow through.
<b>conductor</b>	Materials which allow electricity to flow through them with ease.
<b>insulator</b>	Materials that do not allow electricity to pass through them with ease.
<b>loop</b>	A complete circuit.
<b>switch</b>	A toggle which is changed by someone as way of controlling an electrical circuit or system.
<b>resistance</b>	A measure of how much an object opposes the flow of electrons.



### Lesson Sequence

- Investigate circuits and their components
- Investigate differences between mains and battery powered circuits
- Investigate which materials conduct electricity
- Investigate the purposes of conducting and insulating materials
- Create switches within a circuit
- Investigate how to change the brightness of a bulb

### We can conserve energy by:

- Turning off electrical devices
  - Turning lights off
- Using renewable sources such as solar and wind power
- Using energy-saving lightbulbs

