

Pye Bank CE Primary DSAT Knowledge Organiser

YEAR 2

PHYSICS : How does electricity affect our lives?

SCIENCE

KEY VOCABULARY



battery

Battery: A device, containing one or more electrical cells, storing energy that can be converted into electrical power.



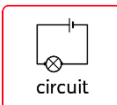
bulb

Bulb: The part of a lamp which gives out light when electricity passes through it.



buzzer

Buzzer: Something that makes a loud buzzing sound when electricity passes through it.



circuit

Circuit: The path around which an electric current circulates. An electric current will only travel around a closed, complete circuit.



mains electricity

Mains Electricity: Electricity supplied directly from power stations to houses and other buildings.

KEY CONCEPT

Electricity Safety

Signs like this one are used to warn us when there is a danger of electricity.

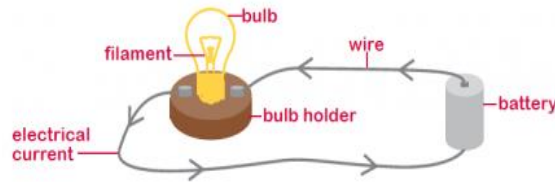
To keep ourselves safe we need to make sure we:

- never touch exposed wires.
- never leave liquids next to electrical appliances or operate devices with wet hands.
- must switch off a light bulb at the mains before changing them.
- should turn off electrical appliances overnight or in a house that is going to be left empty.



KEY CONCEPT

This is a circuit.



Energy comes from the battery and is 'pushed' around the circuit to make the bulb light up. The electrical energy is then changed to light (bulb) or sound (buzzer energy).

STICKY KNOWLEDGE

1. Electricity is a type of power used to make something work.
2. Some things *need* electricity to work and some things don't.
3. Some things use battery power and some use mains electricity to work.
4. Electricity can be dangerous.

KEY CONCEPT

Some things need electricity and some don't. Just because something moves (e.g. a wind-up toy) it doesn't mean that it requires electricity to run.

Here are some things that need electricity:



Here are some things that don't need electricity:



Some appliances use battery power and some use mains electricity.

Electricity can be made in different ways. These include:

- burning fossil fuels (oil, gas, coal) at power stations
- using wind power generated by wind turbines
- using solar power generated by the sun
- using water power (sometimes called hydropower) generated by running or falling water

- Electricity is transported to our homes, schools and places of work through wires and cables.



- Electricity can also be stored in batteries (sometimes called cells).
- Batteries come in different shapes, strengths and sizes.

