

Key Knowledge

Key Skills

Key Vocabulary

Examples of Electrical Conductors

copper steel

Examples of Electrical Insulators

wood plastic
paper rubber glass fabric

To work safely with **circuit** components in the classroom:

- None of the equipment needs to use mains power, so do not put any of it in or near plugs.
- Report any damaged or broken equipment to your teacher. Do not use it.
- Only use equipment as instructed.
- Connect equipment correctly.
- Disconnect equipment after use and put it away neatly.

Materials can be tested in a **circuit** to see if they are **electrical conductors** or **electrical insulators**.

10p = metal =
electrical conductors

test circuit

ruler = plastic =
electrical insulators

Appliances

Many everyday **appliances** rely on **electricity** for them to work. Some **appliances** use **mains electricity** (are plugged into a socket) and others have a **battery** to make them work. Examples of **mains-powered appliances** include toasters and televisions. **Battery-powered appliances** can include mobile phones and torches.

mains-powered

battery-powered

- I can identify common appliances that run on electricity
- I can make circuits and Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.
- I can investigate whether circuits are complete or incomplete.
- I can recognise some common conductors and insulators, and associate metals with being good conductors.
- I can explain how a switch works in a circuit, build switches and report my findings.
- I can discuss and solve problems about electricity using reasoning skills.

Organism: 'Organism' is another way to refer to a living thing. habitat A habitat is the specific area or place in which particular animals or plants may live.

Environment: The environment is the natural world, either as a whole or in a particular area.

Species: A species is a group of living things that share enough similarities to be able to breed and produce young capable of breeding.

Endangered species: An endangered species is a species that is at risk of extinction.

Extinct: Extinct means that a species has no more members alive.

Classification: Classification is the process of grouping living things according to their similarities.

Warm-blooded: Warm-blooded refers to animals that are able to generate their own body heat.

Cold-blooded: Cold-blooded refers to animals that are not able to generate their own body heat.

Vertebrate: A vertebrate is an animal that has a spine.

Invertebrate: Is an animal that does not have a spine.

Characteristic: A characteristic is a particular feature or quality that is specific to an individual or species.

Metamorphosis: Metamorphosis is the process by which certain animals completely change their appearance and body structure.