

Year 4 Electricity

Science Knowledge Organiser

Knowledge Skills Vocabulary



Knowledge Progression

What can electricity do?

Which circuits will work?

How do torches work?

How do switches work?

Which materials are conductors / insulators?

How can I use my knowledge to design and make a torch?



Curriculum Coverage

Pupils should be taught to:

- Identify common appliances that run on electricity
- Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- Recognise some common conductors and insulators, and associate metals with being good conductors.

Scientific vocabulary

Electricity

Appliances: fridge, freezer, TV, computer, iron, kettle.

Series circuit

Components: battery, bulb (lamp), bulb (lamp) holder, buzzer, crocodile clip, leads, wires, switch

Describing words: brighter, duller, slow, fast, quiet, loud

Conductor, insulator

Effects of electricity: Light, sound, movement, heat

Switches – open, close

Skills Progression

- To be able to set up a simple practical enquiry
- To be able to record findings using drawings
- To be able to use results to make predictions

