Electricity- Year 4- Kapow unit- Electricity and circuits

Previous learning

Key Vocabulary for Year 4

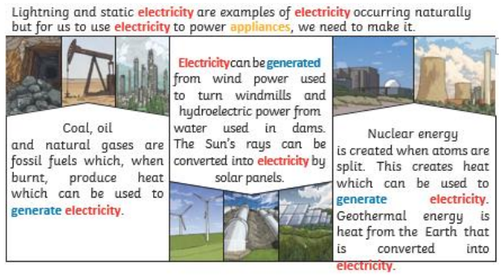
Cells	**Insulator**
Wires	**Renewable**
Bulbs	**Non-renewable**
Switches	
Buzzers	
Battery	
Circuit	
Series	
conductor	

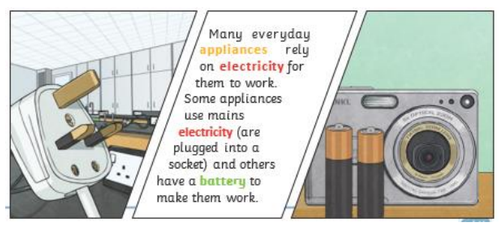
Previous vocabulary

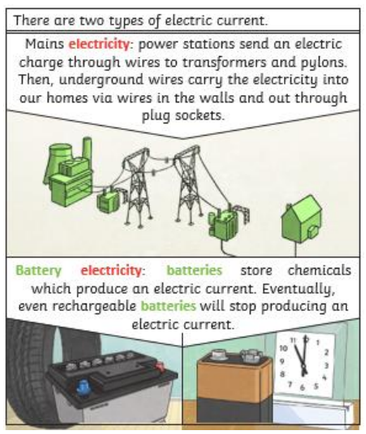
Useful links

https://www.weareteachers.com/electricity-experiments/

https://www.science-sparks.com/easy-electricity-projects-for-kids/







Key scientists you could look at…

Ben Franklin

Scientific skills

Working scientifically	Questioning and enquiry	Observing and measuring	Investigating	Recording	Grouping and classifying
To use practical scientific method, processes and skills	Ask relevant questions and use different types of scientific enquiry to answer them	Make systematic and careful observations, take accurate measurements using standard and non-standard units and a range of equipment, including thermometers and data loggers. Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them. Help make decisions about what observations and equipment they will need to use.	Set up simple practical experiments, comparative and fair tests. Recognise when a simple fair test is necessary and help to decide how to set it up. Be able to think of more than one variable factor.	Gather, record, classify and present data in a variety of wats to answer a question. Record simple findings using scientific vocabulary, drawings, labelled diagrams, keys, bar charts and tables. Report on findings including oral and written explanations, displays or presentation of results and conclusions. Use notes, simple tables and standard units to decide how to record and analyse data.	Identify differences, similarities and changes related to scientific ideas and processes. Talk about criteria for grouping, sorting and classifying and use simple keys. Compare and group according to behaviour or properties, based on testing.

Experiment and activity ideas

Building series circuits using equipment	Investigate static electricity	Create a potato clock	investigate conductors and insulators	Create your own torch

Knowledge- objectives

Identify common appliances that run on electricity

Construct a simple series 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.

Resources in school

Wires, crocodile clips, bulbs, batteries, switches, bulb holders, buzzers, range of different materials