Science Overview – Electricity

Year Four

Spring Term

Key Question: What does it mean to achieve?

National Curriculum

- 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.

SUBSTANTIVE KNOWLEDGE

1) Know what electricity is and name some appliances which are powered by mains and battery power.
2) Know what a circuit is and some of the components of a circuit.
3) Know how to construct a circuit.
4) Know the difference between a complete and an incomplete circuit.
5) Know how switches can be used to open or close a circuit.
6) Know the difference between electrical insulators and conductors- identify both.
7) Know how to use electricity safely.

Key Vocabulary	electricity, appliances, battery, circuit, cell, wires, component, mains electricity, electrical conductor, electrical insulator
Previous year groups key vocabulary:	This unit is first taught in Y4.
Disciplinary Concepts	• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
Enquiry type to cover and enquiry suggestion	**Research using secondary sources (enquiry type)** How has electricity changed the way we live?
Learning Milestones /Assessment	I can… • identify a main/battery powered appliance. • explain the importance of electrical safety. • identify a complete and incomplete circuit. • name circuit components. • identify electrical insulators and conductors.


Stenson Fields Primary
Community School