

Science Curriculum: Year 4/5 Cycle B

What are the aims and intentions of this curriculum?

That children:

- are allowed to explore and discover the science in the world around them.
- are provided with the opportunities to develop their curiosity and to ask questions.
- are taught the skills they need to find answers to their own questions.

Term	Topic	Knowledge	Skills	Assessment
Autumn 1	Living things and their habitats	Know that living things can be grouped Know some of the ways that living things can be grouped. Name a variety of living things in local and wider environment. Know some of the ways that environments can change. Know that change sometimes poses danger for living things.	Observe (over time) Compare Explore Notice Sort/classify Devise (an investigation) Investigate Record data Interpret results	
Autumn 2	Evolution and Inheritance	Know that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Know that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. Know how animals and plants have adapted to suit their environment in different ways and that adaptation may lead to evolution.	Recognise Identify Describe Explore Ask Research Conclude Design Compare	



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Spring 1	Sound	Know that some sounds are made by something vibrating. Know that vibrations from sounds travel through a medium to the ear. Know that the pitch of a sound is affected by the features of the object that produced it. Know that the stronger the vibration the louder the sound. Know that sounds get fainter as the distance from the source increases	Explore Observe Describe Classify (sources) Measure Notice (patterns) Ask (questions to be investigated) Investigate Measure Record Conclude Report
Spring 2	Electricity	Know some common appliances that run on electricity. Know the parts of a simple series circuit, including cells, wires, bulbs, switches and buzzers. Know whether or not a bulb will light in a simple series circuit (based on whether or not the lamp is part of a complete loop with a battery). Know that a switch opens and closes a circuit (and this affects whether or not a lamp will light in a simple series circuit.	Construct (circuits) Explore Classify Compare Ask – enquiry questions Devise Investigate Discover Measure Record Conclude
Summer 1	States of Matter	Know that materials can be grouped into solids, liquids and gases. Know that some materials change state when they are heated or cooled. Know the temperature at which change of state occurs in degrees Celsius (°C)	Observe Explore Compare Notice Describe Classify Identify Ask (questions)



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		Know the part played by evaporation and condensation in the water cycle. Know that the rate of evaporation is associated with temperature.	Devise Predict Measure Record Report	
Summer 2	Properties and changes in materials			

Principal Focus:

- Explore, test, develop and talk about everyday phenomena
- Ask questions about what they observe
- Make decisions about which type of scientific enquiry will be most likely to result in answers
- Grouping and classifying and noticing patterns
- Carrying out simple and comparative fair tests
- Draw simple conclusions and use scientific language to talk about what they have found out
- Observe changes over time
- Carry out simple, comparative and fair tests