

# **Curriculum Long Term Plan – Science**



	Autumn		Spring		Summer	
			Seasonal Changes			
	Make regular observations and gather data about seasonal change.					
	Everyday	Seasonal	Animals & Humans		Plants	Seasonal
Year 1	Materials Identify, name, group and describe properties of across the Autumn.	Changes Observe and describe changes	Identify basic parts of the human body. Identify, name, group and describe animals.		Identify, name and describe structure of flowering plants.	changes Observe and describe changes across Spring and Summer everyday materials.
	Plants					
	Plant seeds/ bulbs					
	(Gathering evidence, make observations).					
	Uses Of	Uses Of	Animals & Humans		Plants	Living Things
	Everyday	Everyday	What do animals need to grow and stay		Seeds and bulbs	& Habitats
Year 2	Materials Identify and compare suitability of everyday materials to their uses	Materials Find out how materials can be changed	healthy? How humans stay healthy Offspring		What do plants need to grow and stay healthy?	Living, non-living and dead Habitats Simple food chains
	Plant seeds/ bulbs					
	(Gathering evidence, make observations).					
	Light	Magnets &	Animals & Humans		Plants	Rocks
Year 3	What is light What are shadows Reflectors	Forces Friction Magnets	Nutrition Skeletons and muscles		Functions of part of plants Requirements of plants and varieties Life cycle of a plant	Compare and group Fossil formation Soil
	Electricity	States Of	States Of	Animals &	Living Things	Sound
Year 4	Series circuits Switches Electrical conductors and insulators	<b>Matter</b> Solids Liquids Gases Material changes	Matter Water Cycle Evaporation Condensation	Humans Digestive System inc Teeth (Food chains)	& Habitats Classification keys Environmental changes	How sounds are made Pitch Volume
	Forces	Properties of	Properties of	Earth & Space	Living Things	Animals &
Year 5	Gravity Air resistance Water resistance Friction Mechanisms	and Changes in Materials Properties of materials statements	and Changes in Materials Changes of materials statements	Solar system Lunar system Day and Night	& habitats  Comparing lifecycles Plant and animal reproduction	Humans Changes and ageing
	Electricity	Living Things	Animals & Humans Circulatory system Diet, exercise, drugs and lifestyles Nutrients transportation		Evolution	Light
Year 6	Voltage Circuit diagrams Component functions	& Habitats Grouping and classifying animals (including microorganisms) Based upon specific characteristics			Fossils and changes over time Differences between offspring and parents Adaptations to environment	Light travels in straight lines How we see objects Shadow shapes

## **Considerations When Sequencing the Science Curriculum**

## • Ongoing Topics:

Some topics require coverage throughout the year, such as *Seasonal Changes* and *Plants* in Years 2 and 3. These should be revisited regularly to reflect changes over time and support observational skills.

## Conceptual Complexity:

More complex concepts—such as *Sound* in Year 4, *Earth and Space* in Year 5, and *Light* and *Evolution* in Year 6—are best taught later in the year. This allows pupils to build foundational knowledge and cognitive readiness before tackling more abstract ideas.

# • Topic Relationships Within a Year:

The sequence should reflect logical progression. For example:

- In Year 4, States of Matter should be taught before Sound.
- In Year 5, *Living Things and Their Habitats* should precede *Animals Including Humans*. These sequences support conceptual links and scaffold learning effectively.

## • Topic Length and Splitting:

Consider the duration and depth of each topic. Some, such as *Animals Including Humans* in Years 1, 2, and 6, and *Properties and Changes of Materials* in Year 5, may benefit from being split across different terms to ensure thorough coverage and understanding.

# Additional Notes on Sequencing the Science Curriculum

#### Year 4

## Living Things and Their Habitats / Animals Including Humans

Pupils should be taught to construct and interpret a variety of food chains, identifying producers, predators, and prey.

These objectives fall under the *Animals Including Humans* topic. To support understanding through first-hand experience, this should be taught **after** pupils have visited a habitat and identified the plants and animals within it.

# States of Matter / Sound

In the *States of Matter* topic, children learn about solids, liquids, and gases. This foundational knowledge is essential for understanding how **vibrations from sounds travel through a medium to the ear** in the *Sound* topic.

Therefore, States of Matter should be taught before Sound.

## Year 5

## Living Things and Their Habitats / Animals Including Humans

Before exploring the human life cycle, it is beneficial for pupils to first understand the life cycles of plants and animals.

As such, Living Things and Their Habitats should be taught **before** Animals Including Humans.

### Forces / Earth and Space

Teaching *Forces* first allows pupils to develop an understanding of **gravity**, which can then be applied to their learning in *Earth and Space*—specifically, to explain why planets orbit the Sun and why the Moon orbits the Earth. Therefore, *Forces* should be taught **before** *Earth and Space*.