## **My Science Learning Journey**

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Offered as part of daily 'Continuous Provision'— following children's interests  Looking at all areas of science throughout year, highlighting changes when in the Outside Area and Eco Area					
	Animals including Humans  Our body	Seasons Season of Autumn	Living things and their Habitats  Habitats in the Artic and Antarctica.  Seasons:  Season of Winter	Living things and their Habitats  African Plains  Seasons:  Season of Spring	Living things and their Habitats  The Rainforest	Animals including Humans  Being Healthy Seasons: Season of Summer
Year 1	Seasonal Changes  To be observed throughout the entire year  Observe changes across the four seasons  Describe weather associated with the seasons and how day length varies.		Everyday Materials  Compare and group together a variety of everyday materials  Identify and name objects and the materials from which they are made.	Animals including Humans  Identify characteristics specific to mammals, birds, reptiles, amphibians and fish  Recall the diets of carnivores, herbivores and omnivores.	Plants  Identify and name a variety of common wild and garden plants including deciduous and evergreen trees  Describe the basic structure of common flowering plants	
Year 2	Animals including Humans  • Learn the basic needs of animals for survival, as well as the importance of exercise and nutrition for humans.  • Compare and describe the life cycle of a human.		Observe how plants grow and what they need to grow.     Plant seed and observe how plants need water, light and a suitable temperature to grow and stay healthy.	Uses of Everyday Materials  Identify and compare the sustability of materials like wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.  Change materials by squashing, bending, twisting and stretching.	Living Things and their Habitats  Identify and name a variety of plants and animals in their habitats, including microhabitats  Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain  Identify and name different sources of food.	
Year 3	Animals including Humans     Learn about the human skeleton     Identify key bones and explore how muscle changes result in movement.     Balanced diet		Rocks  Look at appearance and physical properties of rocks Compare and group different rock samples  Learn about how fossils and soils are formed.	Forces and Magnets What is friction? How do magnets work?	Plants  Look at the life cycle of a flowering plant  Investigate the structure and function of the parts of a flowering plant.	Light  Look at light sources  Reflection and shadow formation.
Year 4	Living in Environments  Make classification keys. Look at how habitats change	Eating and Digestion  Study the key organs in the digestive system.  Look at types of human teeth Investigate factors that impact our dental health.	States of Matter Investigate the properties of solids, liquids and gases Look at the different states of matter. Water cycle		Sound  How are sounds made?  Look at pitch, volume and vibrations	Build circuits     Investigate conductors and insulators
Year 5		Properties and Changes of Materials  Make different mixtures and look at how to separate  Design and create a water filter, sieve soil and evaporate solutions.	Forces  Learn about gravity, friction, air resistance and water resistance Build the most effective pulley system.	Earth and Space  Learn about rotation and day and night Learn about the planets and the moon  What are satellites?	Living Things and their Habitats Compare the life cycles of plants, mammals, birds, amphibians and insects Investigate asexual reproduction in plants.	Animals including Humans (Linked to PSHE)  Learn about human development and changes. Describe how puberty affects girls and boys
Year 6	Animals including Humans  Learn about the heart and circulatory system	Light Learn how light travels in straight lines Investigate shadows and reflections.	Evolution and Inheritance     Look at inherited and environmental characteristics     Evolution of fossils	Living Things and their Habitats  Linnaeus system of classification of animals.  Learn the difference between Vertebrates and invertebrates  Classify Microorganisms	Electricity  Develop their knowledge of circuits,  Look at the effects of changing volta different devices	

# Comparative / fair testing

Changing one variable to see its effect on another, whilst keeping all others the same.



#### Research

Using secondary sources of information to answer scientific questions.



### Observation over time

Observing changes that occur over a period of time ranging from minutes to months.



## Pattern-seeking

Identifying patterns and looking for relationships in enquiries where variables are difficult to control.



Identifying, grouping and classifying Making observations to name, sort and organise items.



### **Problem-solving**

Applying prior scientific knowledge to find answers to problems.

