



SCIENCE CURRICULUM MAP

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	What are animals? Are humans animals? Our Early Years setting and it's grounds (transition) Seasonal changes		Why does the Snowman disappear? How does porridge change when it is cooked? How have we grown since we were babies? How did Jack make the beanstalk grow? Seasonal changes		What do caterpillars turn into? What do animals need? How do we travel from place to place? Seasonal changes	
Reception	Looking at the Early Years environment (transition)How am I special? Seasonal changes	What does the boy need to keep warm in the South Pole? Healthy and unhealthy food choices Seasonal changes	How can we make a healthy food basket for grandma? Can you build a boat for the Gingerbread man (float/sink)?	Why do we get so many new flowers in Spring? Seasonal changes	Are all animals the same? Seasonal changes	How many planets are there?
Year 1	Chemistry - Everyday Materials Begin to understand the difference between objects and the materials they are made from. Begin to identify and name materials as well as identify some of their physical properties. Seasonal change Observe changes in Autumn including weather and day length		Biology - Animals including Humans Identify the basic body parts as well as the body parts which are associated with each sense (human focus). Identify and name a variety of animals and begin to look at their structure (animal focus). Seasonal change Observe changes in winter including weather and day length		Biology - Plants Identify common wild and garden plants as well as deciduous and evergreen trees. Begin to understand the basic structure of plants and trees.. Seasonal change Observe changes in spring and summer including weather and day length.	
Year 2	Biology - Plants pt 1 Observe and describe how bulbs grow into mature plants. (Bulbs need to be planted in Autumn)	Biology - Animals including Humans Notice that animals have offspring which grow into adults Describe the basic needs of humans for survival.	Biology - Animals including Humans Explain the importance of exercise, a healthy diet and hygiene for humans.	Biology - Plants pt 2 Explore seeds and bulbs to help describe how they grow into mature plants. Begin to investigate what plants need to survive and to stay healthy.	Biology - Living things and their habitats Identify and explore things that are alive, dead or never alive. Begin to explore different habitats and understand that most living things live in a habitat which provides basic needs. Begin using a simple food chain.	Chemistry - Uses of everyday materials Identify and compare the suitability of everyday materials and investigate how the shape of some solid objects can be changed.
Year 3	Biology - Animals including Humans Identify that nutrition comes from the food we eat (nutrition). Identify that humans and some other animals have skeletons and muscles for support, protection and movement (movement).	Physics -Forces and magnets Investigate how things move on a surface and identify that some forces require contact. Describe and observe how magnets work and what everyday materials are attracted to magnets.	Chemistry - Rocks Compare and group rocks based on their physical properties. Describe how fossils are formed and understand soil is made up of rocks and organic matter.	Physics - Light Begin to understand why we need light and what darkness is. Recognise how light is reflected and how light from the sun can damage our eyes and investigate shadows.	Biology - Plants Continue to explore the requirements of plants for growth. Identify the functions of the different structures of a plant including how water is transported. Explore plant life cycles of plants and the role of the flower in a flowering plant.	
Year 4	Biology - Living things and their habitats Develop understanding that living things can be grouped in different ways using classification keys. To understand that	Chemistry - States of matter Recognise that materials are grouped as solids, liquids or gases. To understand that the state of a material can change. Understanding the water cycle	Biology - Animals Including Humans Investigate the digestive system in humans and the role of our teeth (human focus). Construct and interpret food chains identifying the predator, prey and producer (animal focus).		Physics - Sound Identify how sounds are made and how these vibrations travel to our ears. Investigate pitch and volume.	Physics - Electricity Identify common appliances that run on electricity. Construct a simple series circuit and carry out investigations involving lamps and switches.

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	environments can change which poses a risk to living things.				Recognise common conductors and insulators.
Year 5	<p>Biology - Animals including humans Describe the changes as humans develop to old age (including puberty).</p>	<p>Chemistry - Properties and changes of materials Compare and group materials based on their properties. Notice how some materials dissolve. Investigate different methods of separating mixtures. Give reasons based on evidence for uses of everyday materials. Understand the difference between reversible and irreversible changes.</p>	<p>Biology - Living things and their habitats Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals.</p>	<p>Physics- Forces Understand the force of gravity acting between the Earth and a falling object. Identify the effects of air resistance, water resistance and friction that act between moving surfaces. Understand that force and motion can be transferred through mechanical devices such as gears, pulley.</p>	<p>Physics - Earth and space Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. Describe the movement of the Moon relative to the Earth. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p>
Year 6	<p>Biology - Animals including Humans Understand how the circulatory system works to transport blood, nutrients and water. Understand the impact of diet, exercise, drugs and lifestyle on our bodies.</p>	<p>Biology - Living things and their habitats Use classification keys, extending this to micro-organisms. Begin to give reasons for classification.</p>	<p>Biology - Evolution and inheritance Understand how living things have evolved and adapted over time. Understand variation in offspring.</p>	<p>Physics - Light Understand how light travels in straight lines and the implications of this. Understand how light helps us to see objects and explain why shadows have the same shape as the objects that cast them</p>	<p>Physics - Electricity Investigate how the number and voltage of cells in a circuit impacts components in the circuit. Compare and give reasons for variations of components and begin to draw diagrams of circuits using symbols.</p>