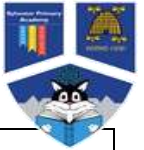


# Sylvester Primary Academy Science Curriculum Overview 2023-2024



	Autumn	Spring	Summer			
<b>Nursey</b>	Weather - Hands on exploration of the senses and work on seasons are continuous throughout the year					
	<p>Seasonal Changes - autumn to winter Autumn collections: acorns, pine cones, leaves, conkers etc (grouping, sorting, identifying) Exploring toys: how they work and, push and pull</p> <p>Colour: skittles</p> <p>Learning about how the children have changed from when they were babies. Identifying and naming body parts. Woodland animals.</p>	<p>Seasonal Changes - winter to spring Pushes and pulls</p> <p>Keeping warm in winter. Exploring water and freezing, ice and melting. Making 3d house models exploring different materials.</p> <p>Exploring penguins/polar bears: habitat, how they can live in cold climates, food. Looking after birds in Winter. Planting seeds, looking after them and watching them grow. Naming basic flower/plant parts.</p>	<p>Seasonal Changes - spring to summer Exploring how vehicles travel on different gradients Staying safe in the Sun</p> <p>How to keep cool in Summer. Learning to make bubbles.</p> <p>Life cycle of a butterfly. Bug hunts: finding and identifying mini-beasts. Using body parts to move in different ways. Exploring animals and how they move. Caring for and tending to plants and growing vegetables.</p>			
<b>Reception</b>	Investigating seasonal changes across the year					
	<p><b>Shadows</b> torches, sources of light/silhouettes</p>	<p><b>Reflective materials</b> Sensory Tent- coloured lenses.</p>	<p><b>Magnets</b> Racing with magnets.</p>	<p><b>Life Cycle of Duckling</b> <b>Plants:</b> how and what plants need to grow, parts of a plant (flowering) and varieties of plants. Understand different types of plants.</p>	<p><b>Space</b> Google Earth, Making Planets</p>	<p><b>Animals &amp; Birds</b> Naming different animals and birds e.g. explore different breeds and explore similarities and differences. Caring for animals</p>

<p>Key Stage 1</p> <p>Cycle A</p>	<p>Investigating seasonal changes - covered across the year in both cycles</p>				
<p>Animals including humans</p> <p>Body parts and senses</p>	<p>Animals including humans</p> <p>Naming and classifying a wide variety of animals</p>	<p>Plants</p> <p>Identify common British trees and plants.</p> <p>Key parts of plants including trees,</p>	<p>Everyday Materials</p> <p>Identify and name everyday materials and their properties Distinguish between an object and the material it is made from.</p>		
<p>Key Stage 1</p> <p>Cycle B</p>	<p>Investigating seasonal changes covered across the year in both cycles</p>				
<p>Living things and their habitats</p> <p>Living, dead, never alive.</p> <p>Microhabitats.</p>	<p>Everyday Materials</p> <p>Distinguish between an object and the material it is made from.</p> <p>Identify and name everyday materials.</p> <p>Uses of materials, changing shape of materials</p>	<p>Animals including humans</p> <p>Offspring, needs for survival, healthy living</p>	<p>Plants</p> <p>How seeds grow into plants, what plants need to grow. Identify and describe basic structure of common plants including trees.</p>	<p>Living things and their habitats</p> <p>Living/dead, habitats, mini-beasts, food chains</p>	
<p>Year Three</p>	<p>Taught across the year: Plants - gathering evidence of plant life cycles</p>				
<p>Animals including humans</p> <p>Nutrition, skeletons and muscles.</p>	<p>Rocks and soils</p> <p>Compare and grouping rocks based on their appearance and simple physical properties.</p> <p>Fossils and soils.</p>	<p>Forces</p> <p>Compare how things move on different surfaces. Magnetism and magnetic materials.</p>	<p>Plants</p> <p>Functions of the parts of flowering plants</p> <p>Requirements of variety of plants for life and growth.</p> <p>Investigate the way in which water is transported within plants.</p> <p>Role of flowers in the life cycle of flowering plants.</p>	<p>Light</p> <p>Requirement of light to see, darkness is the absence of light, light is reflected from surfaces.</p> <p>Sun safety</p> <p>Shadows</p>	

<p><b>Year Four</b></p>	<p>Taught across the year: Living things and their habitats - naming and identifying living things in the local environment</p>					
<p><b>Electricity</b></p> <p>Common electrical appliances. Construct and name parts in a simple series electrical circuit. Switches, conductors and insulators.</p>	<p><b>States of matter</b></p> <p>Compare and group materials into solids, liquids and gases. Observing and measuring changes of state. The role of evaporation and condensation in the water cycle.</p>			<p><b>Animals including humans</b></p> <p>Human digestive system. Identify the different types of teeth in humans and their simple functions. Construct and interpret a variety of food chains. Identify carnivores, herbivores and omnivores.</p>	<p><b>Habitats</b></p> <p>Living things can be grouped in a variety of ways. Classification keys. Environmental changes and their impact on living things.</p>	<p><b>Sound</b></p> <p>How sounds are made. How vibrations travel through a medium to the ear. Pitch and volume.</p>
<p><b>Year Five</b></p>	<p><b>Living things and their habitats</b></p> <p>Describe the difference in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some animals and plants</p>	<p><b>Animals including humans</b></p> <p>Changes as humans develop to old age.</p>	<p><b>Forces</b></p> <p>Gravity, air resistance, water resistance and friction. Mechanisms including gears, levers and pulleys.</p>	<p><b>Earth and Space</b></p> <p>Movement of the Earth, and other planets, relative to the Sun in the solar system. Movement of the moon in relation to the Earth Day and night.</p>	<p><b>Properties of materials</b></p> <p>Compare and group everyday materials including by their hardness, solubility, transparency, conductivity and response to magnets. Know that some materials dissolve in liquid to form a solution. Separating mixtures. Uses of materials based on comparative tests.</p>	<p><b>Changes of materials</b></p> <p>Dissolving, mixing and changes of state are reversible changes. Some changes result in the formation of new materials, and that this kind of change is not usually reversible.</p>

Year Six	Electricity	Living things and their habitats	Animals including humans	Evolution and inheritance	Light
	<p>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</p> <p>Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.</p> <p>Use recognised symbols when representing a simple circuit in a diagram.</p>	<p>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.</p> <p>Give reasons for classifying plants and animals based on specific characteristics.</p>	<p>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p> <p>Impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>Describe the ways in which nutrients and water are transported within animals, including humans.</p>	<p>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>	<p>Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.</p> <p>Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.</p> <p>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p>

Biology

Chemistry

Physics