

South Stanley Infant and Nursery School

Science Curriculum Overview



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Throughout the year, Nursery children will have opportunities to use all their senses in hands-on exploration of natural materials and their environment. They will have opportunities to talk about what they observe, broadening their understanding of new vocabulary. Children will begin to understand the need to respect and care for the natural environment and all living things.					
	<p>In the first half term, Nursery children will be learning about Living things and their habitats. They will:</p> <ul style="list-style-type: none"> • Explore the surrounding natural environment. <p>Children will also learn about Sound. They will:</p> <ul style="list-style-type: none"> • Listen to sounds. • Explore making sounds. 	<p>Nursery children will be learning about Humans. They will:</p> <ul style="list-style-type: none"> • Learn about their senses. • Learn how to take care of themselves. • Learn about the life cycle of humans. 	<p>In the first part of the Spring term, Nursery children will be learning about Materials. They will:</p> <ul style="list-style-type: none"> • Explore a range of materials. • Talk about differences between materials and changes they notice. • Shape and join materials. <p>Children will also explore Forces. They will:</p> <ul style="list-style-type: none"> • Feel forces. • Explore how things work. • Explore how objects/ materials are affected by forces. 	<p>Continuing their learning about Materials, children will:</p> <ul style="list-style-type: none"> • Combine and mix materials. • Change materials by heating and cooling. 	<p>In the Summer term, children will be learning about Animals. They will:</p> <ul style="list-style-type: none"> • Name and describe animals that live in different habitats. • Describe different habitats. 	<p>In the second part of the Summer term, children will continue learning about Living things and their habitats. They will:</p> <ul style="list-style-type: none"> • Explore the surrounding natural environment. • Search for minibeasts in their habitats. <p>Nursery children will also learn about Plants. They will:</p> <ul style="list-style-type: none"> • Plant seeds and care for growing plants.

			Children will also have the opportunity to find out about Light . They will: <ul style="list-style-type: none"> • Explore different light sources. 			
Reception	Building on experiences children have had in Nursery, Reception children will continue to explore the natural world around them. They will describe what they see, hear and feel whilst outside. Over the course of the year, children will learn about Seasonal change , playing and exploring in all seasons and in different weather. They will observe living things throughout the year and develop their understanding of the effect of changing seasons on the natural world.					
	Following on from their work in Nursery, Reception children will continue their learning about Living things and their habitats . Children will: <ul style="list-style-type: none"> • Explore the plants and animals in the surrounding natural environment. Children will also find out about Light . They will: <ul style="list-style-type: none"> • Explore shadows, making shadow puppets and observing 	This half term, Reception children will be learning about Materials . They will: <ul style="list-style-type: none"> • Observe, measure and record how materials change when heated and cooled. • Compare how materials change over time and in different conditions. 	In the first part of the Spring term, Reception children will be learning about Earth and Space . They will: <ul style="list-style-type: none"> • Learn about the Earth, Sun, and Moon. • Learn about space travel. • Make objects from different materials, including natural materials. 	This half term, Reception children will be learning about Animals . They will: <ul style="list-style-type: none"> • Name and describe animals that live in different habitats. • Learn about the life cycles of animals. • Compare adult animals to their babies. • Observe how baby animals change over time. 	In the Summer term, Reception children will be learning about Humans . We will: <ul style="list-style-type: none"> • Know and talk about the different factors that support our overall health, including healthy eating and toothbrushing. 	In the final half term, Reception children will continue to learn about Living things and their habitats . They will: <ul style="list-style-type: none"> • Explore plants in the surrounding natural environment. Following on from their work on Sound in Nursery, children will: <ul style="list-style-type: none"> • Listen to sounds outside and identify the source.

	their own shadows outside.					
Year 1	Over the course of the year, children will learn about Seasonal Change . They will: <ul style="list-style-type: none"> Observe changes across the four seasons. 					
	<p>In the first term of Year 1, the focus topic for Science will be: Animals, including humans. Children will learn:</p> <ul style="list-style-type: none"> Humans are animals. We have key parts in common, but these vary from person to person. Humans (and other animals) find out about the world using their senses. We have 5 senses- sight, touch, taste, hearing and smell. These senses are linked to particular parts of the body. Animals, including humans, have the basic needs of feeding, drinking and breathing. To grow into healthy adults, they also need the right amounts and types of food and exercise. All objects are either living, dead or have never been alive. Living things are plants and animals. Dead things include dead animals and plants and parts of these that are no longer attached. 	<p>In the Spring term, the Science topic will be: Everyday Materials. Children will learn:</p> <ul style="list-style-type: none"> All objects are made of one or more material(s). Some objects can be made from different materials, eg. Plastic, metal or wooden spoons. Materials can be described by their properties, eg. Shiny, stretchy, rough, etc. Some materials, eg plastic, can be in different forms with very different properties. 	<p>In this term, the focus of work in Science will be: Plants. Children will learn:</p> <ul style="list-style-type: none"> That growing in their environment, there will be a vast number of plants which all have specific names. These can be identified by looking at characteristics of the plant. Plants have common parts, but they vary between the different types of plants. Some trees keep their leaves all year while others drop their leaves during Autumn and grow them again during Spring. 			
Year 2	Children will continue to learn about Seasonal change in Year 2. They will: <ul style="list-style-type: none"> Observe and describe weather associated with the seasons and how the day length varies. 					

Building on learning in Year 1, children will continue their learning in the Science topic: **Animals, including humans.**

They will learn:

- Animals vary in many different ways having different structures, eg wings, tails, ears, etc. They also have different skin coverings, such as scales, feathers, hair. These features can be used to identify animals.
- Animals, including humans, have offspring which grow into adults. (e.g. Egg, chick, chicken).
- Animals eat certain things- some eat animals (carnivores), some eat plants (herbivores) and some eat both plants and animals (omnivores).

Following on from their work in Year 1, children will now learn about **Uses of everyday materials.**

They will learn:

- All objects are made from one or more material(s) that are chosen because they have suitable properties.
- Objects made from some materials can be changed in shape by bending, stretching, squashing and twisting.

Building on learning about **Plants** in Year 1, children will now deepen their understanding in Year 2. Children will also study **Living things and their habitats.**

They will learn:

- Plants grow from either seeds or bulbs. These then germinate and grow into seedlings which then continue to grow into mature plants.
- Plants may have flowers which then develop into seeds, berries, fruits, etc.
- Seeds and bulbs need certain conditions in order to grow well and stay healthy. They need different amounts of water and light.
- Animals and plants live in a habitat to which they are suited. The habitat provides the basic needs of the animals and plants- shelter, food and water.
- Within a habitat there are different micro-habitats, eg in a woodland- leaf litter, bark on trees. These micro-habitats have different conditions and this affect which plants and animals live there.
- The way that animals obtain their food from plants and other animals can be shown in a food chain.