

Our plan for progression in Science and how it meets the aims of the National Curriculum.

Science is taught over a 2 year rolling programme in each key stage in order to plan for mixed age classes. The knowledge taught in Year One is built on in Year two so even though each topic from the national curriculum is taught twice, expectations are different in each year group in KS1. Seasonal changes is a topic that is ongoing throughout the year. We have a 'season watch window' with displays, research opportunities and tasks linked through it to help children observe changes that happen over the seasons and the changing weather patterns.

The 'Big Idea' of our long term plans and how they link to our local area.

<p>KS1 A</p>	<p>Superheroes Which material should we use to make an outfit for Traction Man's next adventure? Y1 will learn to recognise and name materials that an object is made from. They will learn more about each materials and learn how to group them. Y2 will name materials and know why they are chosen for specific purposes. They will learn how materials can be changed. The children will learn about humans 'super powers'. Y1 will learn how to link the correct part of the human body to each sense. Y2 will learn how to look after our bodies through exercise, a balanced diet and good hygiene. We will learn about the inventor Charles Mackintosh</p>	<p>Amazing Animals Do all animals have a skeleton ? Y1 will learn to name animals and sort them into categories. They will learn what animals eat and where they find their food. They will be able to name body parts. Y2 will know about stages in an animal's life cycle, what they need to survive and why specific habitats provide basic needs for the animals that live there. They will know about food chains and will be able to name different sources of food for animals. We will learn about the life and work of David Attenborough and how he has helped us learn more and his work now on conservation.</p>	<p>What a wonderful world Do big seeds produce large plants? Y1 will know the name of a variety of common wild and garden plants. They will know the name of parts of a flowering plant and the parts of a tree. Y2 will know how seeds and bulbs grow into plants. They will know what plants need to grow and stay healthy. The children will explore the story of 'Jack and the Beanstalk' as a hook into this topic. They will learn about Victorian plant hunters and follow in Charles Darwin's footsteps as we make plant diaries as he did.</p>
<p>KS1 B</p>	<p>Science and Story How are fossils made? The children will know about materials as above through the stories of ' Mary Anning – Stones and Bones', 'and William Morris and his links to our local area and the dye works in Leek. Also The Three Little Pigs' and 'The Fairy Godmother's Day Off'.</p>	<p>Fabulous food and Fairy Tales Which food would be the best for Mr. Grinling's picnic? The children will know about animals including humans as above. They will learn about healthy food and the effects of exercise through the stories of Mr. Grinling.</p>	<p>Down in the Jungle The children will learn about plants as above. They will learn about living things in their habitats. Y1 will learn how animals find their food. Y2 will know about food chains and will be able to name different sources of food for animals. They will learn about plants and animals in a contrasting habitat like the jungles of India.</p>
<p>KS2 A</p>	<p>Walk Like an Egyptian States of matter (Y4 unit) The children will know about different states of matter and the definitions of each one. They will look at the changes made by heating and cooling.</p>	<p>The Super Humans Animals including humans: (Y3 unit skeletons and muscles, nutrition and food) Animals including humans (Y4 unit digestive system, teeth) The children will know about how skeletons and muscles work together to make our bodies functional. They will learn about the journey of food from what we eat to how it travels through our bodies.</p>	<p>Rambling Round the Rainforest Plants (Y3 unit) Living things and their habitats (Y4 unit) Animals including humans (Y4 unit food chains) The children will learn about the different habitats in the world and how certain animals are suited to certain conditions. They will learn about the different plants found in different places and name the parts of the plants. We will learn about food chains and use the terms predator, prey, producer and consumer.</p>
<p>KS2 B</p>	<p>Location, Location, Location Light (Y3 Unit) Electricity (Y4 unit) The children will know how to make an electrical circuit</p>	<p>Caesar Seizes Chester Forces and Magnets (Y3 unit) Sound (Y4 unit) The children will know about which materials are magnetic and</p>	<p>The Flintstones Rocks (Y3 unit) The children will know about the different types of rocks, their properties and their features. They will know how</p>

	and name all the components. They will know about light and shadows, that light travels in straight lines and how to make it travel round corners.	which are not, they will investigate whether bigger magnets are more magnetic. They will know about vibrations through music and how sound travels.	fossils are made and where soil comes from.
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<https://www.bbc.co.uk/programmes/p0117266> Use this link to Curious Cat to watch short videos on how materials are made

Vocabulary for the new curriculum available from CW