



Year 2: Science Overview 2021- 2022/2022 -2023

Topic	<u>Autumn</u> Out of Africa	<u>Spring</u> How to be a Victorian	<u>Summer</u> Wonderful Water
Main focus	Geography	History	Science
Knowledge	<p>Observe how seeds and bulbs grow into mature plants</p> <p>Find out how plants need water, light and a suitable temperature to grow and stay healthy</p>	<p>Identifying and comparing uses of Different Materials</p> <p>Find out how solid shapes can be changed by squashing, twisting etc.</p>	<p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</p> <p>Notice that animals, including humans , have offspring which grow into adults</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>Explore and compare the differences between things that are living, dead and things that have never been alive</p> <p>Identify that most creatures live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</p> <p>Identify and name a variety of plants and animals in their habitats, including micro-habitats</p> <p>Describe how animals obtain their food from plants and other animals, using the idea of a</p>



			simple food chain and name different sources of food.
Enquiries	<p>Classifying Based on the children's criteria classify seeds and bulbs</p> <p>Observing over time Plant seeds and bulbs and observe how they grow</p> <p>Pattern seeking Children generate questions for investigation such as: Do big seeds germinate more quickly? Does it matter which way round you plant a bulb or seed? Which comes first, the root or the shoot?</p> <p>Researching Look at packets to decide how to plant and care for bulbs and seeds.</p> <p>Researching Research plantlife in Africa. What crops grow there? Do we eat any foods that come from Africa? Examine labels on food products.</p>	<p>Classifying Based on the children's own criteria, classify materials e.g. samples of wood, metal, plastic, etc.</p> <p>Comparative/Fair testing Test materials for different uses, thinking about Victorian inventions.</p>	<p>Classifying Find things that are living Find things that are dead Find things that have never been alive Classify things found in the environment, using their own criteria, leading to living, dead and never been alive</p> <p>Classifying Classify animals found in the sea based on physical structure Classify plants found in the sea</p> <p>Observing over time Observe caterpillars turning into butterflies/tadpoles turning into frogs</p> <p>Pattern seeking In the local environment children generate their own questions eg Where do snails live? Where do you see more butterflies?</p> <p>Researching Use secondary sources to find out more about whales. (Link to core book)</p> <p>Researching Use keys to identify animals found during pond dipping session</p> <p>Researching Research adult animals and their young</p>



Knowledge Matrix	Prior Knowledge and Future Learning					
Working Scientifically	Working Scientifically Skills Year 1 and Year 2					
Experiences	Continuing responsibility for the Kitchen garden - harvesting the fruit and vegetables and cooking healthy, simple dishes with them					
Vocabulary	Plants: Seed, bulb, plant, mature, water, light, moisture, growth, temperature, comparison, healthy, shoot, seedling, germination, soil, earth, reproduction, food store, survival, variety, temperature		Materials: Suitable, unsuitable, purpose, object, material, property, characteristic, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, rigid, flexible, waterproof, absorbent, strong, fragile, rough/smooth, reflective, non-reflective, transparent, opaque, translucent, shape, changed, push/pull, twist, squash, bend, stretch, pinch, poke, roll, squeeze.		Living things and their habitats: Habitat, micro-habitat, food chain, characteristics, environment, dependency, food source, conditions, survival, nutrition, reproduction	
Assessment Tasks	TAPS Assessment Comparing Plant growth in different conditions Working scientifically - observe closely using simple equipment		TAPS Assessment Boat Materials Enquiry focus - describe what they have found out and use their results to make comparisons		TAPS Assessment Sorting living and non-living Working scientifically - Use of appropriate scientific language to communicate their ideas	
Cross - curricular links						
Events	Black History Month Anti- Bullying Week Harvest Assembly Christmas Performance		Crick workshops Science Week - Theme - Connections Book Week		STEAM Exhibition Sports Day Healthy Schools Week	
Core Texts	Lila and the Secret Rain by David Conway	Traditional tale (Christmas Production)	Oliver Twist Charles Dickens	The Poems of Edward Lear Non-Fiction The Victorians	Mousehole Cat Antonia Barber and Nicola Bailey Non-Fiction Pirates	The Storm Whale Benji Davies

EXPERIENTIAL

COMMUNITY

CREATIVITY

RESPONSIVE



	Non-fiction Animals			The Jabberwocky by Lewis Carroll		
Writing is:	RESPONSIVE Responds to what is happening right now CREATIVE Linked to science and the arts COMMUNITY Has a purpose EXPERIENTIAL Is enhanced by experiences					