## Science Whole School Overview – 2022 - 2023

Year Group	Units of work						
	Autumn 1	Autur	mn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Humans and Materials  Begin to use some senses in hands on exploration of natural materials  Begin to explore collections of materials with similar and/or different properties.  Our Environment  Talk about what they see, beginning to use a wider vocabulary  Begin to understand the need to respect and care for the natural environment  Plants  Begin to experience plant seeds and care for growing plants.		Humans and Materials  Begin to use all their senses in hands on exploration of natural materials Begin to explore collections of materials with similar and/or different properties.  Exploration of ice  Plants  Plant seeds and care for growing plants.  Talk about what they see, continuing to use a wider vocabulary Begin to understand the need to respect and care for the natural environment Understand plants need water, sun and light  Forces  Explore how things work Begin to explore and talk about different forces they can feel		Materials  Use all their senses in hands on exploration of natural materials.  Explore collections of materials with similar and/or different properties.  Talk about what they see, using a wide vocabulary.  Talk about the differences between materials and changes they notice  Effect of water on different materials  Animals  Understand the key features of the life cycle of ⇔ chickens/hens  Understand the need to respect and care for all living things.		
					Force Explore how things work.  ⇒ Water wheels, put ⇒ Tractor, horse box Explore and talk about differ	mps, hose pipes	
Reception	Humans Explore the natural world around them. Describe what they see, hear and feel whilst outside  Seasonal Changes Understand the effect of changing seasons on the natural world around them – Autumn into Winter		Animals and Plants  Explore the natural world around them, making observations and drawing pictures of animals and plants  Seasonal Changes  Describe what they see, hear and feel whilst outside  Understand the effect of changing seasons on the natural world around them.  Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class		Animals Explore the natural world around them, making observations and drawing pictures of animals Seasonal Changes and States of Matter Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.		
Year One	Humans What can our bodie Identify, name, draw and basic parts of the huma Understand how we use or	es do?	Seasonal Changes How do Iimals and humans	Materials What are toys made from?  Objects and what they're made of Describe, compare and sort everyday materials	Plants Are all plants the same?	Animals Are animals and humans the same?	Seasonal Changes What have we learnt about the seasons?

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		prepare for winter?			Name basic parts— identify common plants	Name common animals Name carnivores, herbivores, omnivores Describe and compare the structure of a variety of common animals	
	Seasonal Changes - Autumn		Seasonal Changes -		Spring	Seasonal Changes - Summer	
Year Two	Humans How do humans ensure their survival?  Basic needs for survival. Importance of exercise, food hygiene.	Animals Does all animal offspring look like their parents? Animals have offspring, basic needs for survival.	Plants Why are plants so ir Seed/bulb grow into plant need.	•	Materials What are different materials used for? Uses of materials Changing shape of materials	Animals Why do animals choose particular habitats? Living and dead, describe habitats, basic food chains.	Microhabitats
Year Three	Rocks and Soils Group different rocks, how they are formed Fossils	Human Body Skeletons and muscles	Animals including Humans Need for right amount of nutrition	Plants Function - including how water is transported Life cycle of plants	Magnets Compare how magnets move on different surfaces. Group things based on magnetic properties	Light and Shadow  Need for light to see. How shadows are formed - size.	
Year Four	Living Things — Our Changing world Group living things, use classification keys. Change in environment can threaten life	State of matter Solids, Liquids, gases Change state, Evaporation/ condensation	Sound How sound is made, travels. Pitch and volume	Electricity Simple circuits, Switches Conductors and insulators	Food Chains construct and interpret a variety of food chains, identifying producers, predators and prey.	Animals including Humans – Teeth and Digestion Basic function of digestive system. Teeth.	
Year Five	Earth and Space Movement Earth, planets & moon. Night and day	Properties and changes of materials Dissolve, separating, reversible changes. Change	Our Changing world — Living things and their Habitats. Animal - different life cycles, reproduction in plants and animals		Animals Including Humans How humans change with age	Gravity, air/water resistar	rces nce, friction. Levers, pulleys gears

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		that produce new materials				
Year Six	Living Things and Their Habitats Classifications including microorganisms, plants and animals.	Circulatory System Human circulatory system. Exercise, drugs and lifestyle.	Evolution and Inheritance Fossil Offspring different to parents. Animal adaptation—Evolution	Light Travels in straight lines, How light enables us to see. How shadows are formed - shape	Electricity brightness of lamp, volume of buzzer. symbols circuit diagrams.	Animals including Humans Impact of diet, exercise, drugs and lifestyle on their body function. How nutrients and water are transported.