

Science Sequencing Document - Year Reception 2022/ 2023



Term	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2	
Topic	Big wide world		Splash!		Winter wonderland		Starry Night		Sunshine and sunflowers		Shadows and reflections	
Enquiry Questions:	Which animals live around the world?		How does water freeze and melt? Which objects float and sink?		What changes happen during winter?		Why is it dark at night?		Where do mini beasts live?		How are shadows formed?	
Understanding the world EYFS framework:	<ul style="list-style-type: none"> -Explore the natural world around them, drawing pictures of animals and plants. -Know some similarities and differences between the natural world around them and contrasting environments. 		<ul style="list-style-type: none"> -Explore the natural world around them, making observations and drawing pictures of animals and plants. -Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. 		<ul style="list-style-type: none"> -Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. - Explore the natural world around them, making observations and drawing pictures of animals and plants. 		<ul style="list-style-type: none"> -Understand the past through settings, characters and events encountered in books read in class and storytelling. - 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. 		<ul style="list-style-type: none"> - Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps. - Explore the natural world around them, making observations and drawing pictures of animals and plants. 		<ul style="list-style-type: none"> - Describe their immediate environment using knowledge from observation, discussion, stories, non-fiction texts and maps. - Explore the natural world around them, making observations and drawing pictures of animals and plants. - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter 	
Knowledge content:	<ul style="list-style-type: none"> -Litter has a harmful effect on the areas where we live, work and play. -Objects are made from different materials. Everyday materials include, wood, plastic, glass, fabric, metal and stone. Materials have different properties. -Different animals live in different parts of the world and have adapted to the climate and terrain. 		<ul style="list-style-type: none"> -Ice is a solid form of water. -Water turns to ice (freezes) when it is very cold. -When ice is heated it melts and becomes liquid. -Plants and animals are living things. Plants need water, sunlight and air to survive. Animals need food, water, air and shelter to survive. -Some objects float and others sink. 		<ul style="list-style-type: none"> -Different places have different climates and weather. -Some animals live in cold places and have special features to help them to live in the cold. - Plants and animals are living things. Plants need water, sunlight and air to survive. Animals need food, water, air and shelter to survive. -There are lots of different types of birds. -Some animals need us to feed them in the winter. 		<ul style="list-style-type: none"> -Some light sources need electricity or batteries to work, such as a torch, and some do not, such as candles. -A shadow is the same shape as the object that makes it. Shadows change during the day. -Shadows are made when a solid object blocks a source of light. -Objects can be compared and grouped according to their shape, colour, material or use. -Some animals are awake during the day and others during the night. 		<ul style="list-style-type: none"> -Plants and animals are living things. Plants need water, sunlight and air to survive. -Animals need food, water, air and shelter to survive. -Animals have different habitats. -Litter has a harmful effect on where we live work and play. 		<ul style="list-style-type: none"> -Natural phenomena include weather, shadows, rainbows, clouds, flooding and waves. -Shadows created by the sun, move and change shape during the day. -Objects can be compared and grouped according to their shape, colour, material or use. -Some objects are opaque and others transparent. - A shadow is the same shape as the object that makes it. Shadows change during the day. -A reflection is a return of light from a surface. 	
Skills content:	<ul style="list-style-type: none"> -Show care for living things and the environment. -Describe how they can look after their environment. -Name and sort everyday items into groups of the same material. - Name a variety of animals and identify where they live. -Identify common features for different groups of animals, including wild and domestic animals. 		<ul style="list-style-type: none"> -Represent scientific observations by mark making, drawing or creating simple charts and tables. Offer explanations for why things happen, because, then and next. -Talk about and play with objects that float and sink and describe different forces that they can feel. -Describe some ways that plants or animals should be cared for in order for them to survive. 		<ul style="list-style-type: none"> -Describe how the weather, plants and animals of one place is different to another using simple geographical terms. -Describe some ways that plants or animals should be cared for in order for them to survive. -Talk about the changes which happen during the winter. 		<ul style="list-style-type: none"> -Explore and describe electrical and non-electrical light sources. -Make a shadow bigger or smaller using toys, play equipment and a light source. -Compare and group objects and materials according to simple given criteria. -Compare animals and when they are awake/ asleep. 		<ul style="list-style-type: none"> - Describe some ways that plants or animals should be cared for in order for them to survive. - Describe how they can look after their environment. -Describe different habitats lived in by a variety of mini beasts. 		<ul style="list-style-type: none"> -Name and describe natural phenomena, such as the size of shadows, the colours of a rainbow, the speed of clouds moving across the sky and the strength of a wave. -Compare and group objects and materials according to simple given criteria. -Make a shadow bigger or smaller using toys, play equipment and a light source. -Explore reflections in different surfaces. 	
Sequence of learning:	1-Looking after our planet. 2-Recycling and sorting materials. 3-Animals from around the world- similarities and differences. 4-Where do animals live?		1-Melting and freezing. 2- Floating and sinking 3- Hydration		1-Where is it always cold? 2What happens in the winter? 3-Feed the birds.		1-The moon. 2-Why is it dark at night? 3-Making shadows 4-Nocturnal animals 5-Is it soft?		1-Eco gardeners 2-Mini beast habitats 3-Mini beast hunt		1-What is a shadow? 2-Objects in the sun. 3-Shadow patterns. 4-What is a reflection?	
Vocabulary:	Living things World Planet Earth Environment Recycling/ recycle Animals Wildlife Habitat Features Paper	Glass Metal Sorting Classify Compare Similarities Differences Explore Describe Discuss Cloth Materials	Float Sink Freeze Melt Heat Cold Liquid Solid Water Hydration	Hydrate Plants Animals Survive Observation Observe Explore Describe Discuss	Winter Seasons Seasonal changes Cold Freezing Snow Adapt Weather Plants	Animals Explore Describe Discuss Observe Record Observation	Night Day Nocturnal Space Moon Shadows Light Dark Group Compare Light source	Material Soft Hard Rough Smooth Explore Describe Discuss Observe observation	Mini beast Habitat Living things Hunt Observe Record Observations Ecological Environment	Plants Animals Food Water Shelter Explore Describe Discuss observe	Compare Group Size Shape Opaque Transparent Sun Shadow Observe Record	Reflection Mirror Light Surface Explore Describe Observation