



## Science at Stoke by Nayland C of E Primary School

### Overview:

Our Science curriculum is based on a four-year cycle of themes, where children learn about different aspects of Science through our whole school topics entitled, 'Animals', 'Out of this World', 'Being Human', 'Dinosaurs' and 'Material World', 'Blue Planet', 'Identity and Survival' and 'Protecting the Planet'. There are also stand alone units of 'Solids, Liquids and Gases' in Upper Key stage 2 and 'Sound' in Lower Key Stage 2. During their time at SBN, we aim to engender a sense of awe and wonder about the world we are part of and our interaction with it. We do this by learning about key aspects of biology, chemistry and physics in a thematic way and through topics that children can relate to. Wherever possible we make science a 'hands on' experience where children learn by investigation and questioning. The table below highlights the Geographical 'flight path' that the children will follow depending on when they join the school.

### The Big ideas:

The following big ideas are revisited in each Science topic, enabling children to broaden and deepen their scientific view of the world around them. They do this by exploring and talking about their ideas and asking their own questions about scientific phenomena, observing, testing and analysing. Their ideas help them to understand how the world operates

Characteristics- What is this like? Why is it like this? How is it similar to other things?

Purpose - What is this for? What does this do? How does this work?

Result- What happened? Why did this happen? How did this happen?

Evidence - How do you know it happened? How can you prove it?

	Reception		Year 1		Year 2		Year 3		Year 4		Year 5		Year 6	
<b>Cycle 1</b>	<b>Animals</b> Identifying animals and off spring	<b>Out of this World</b> Space and materials	<b>Being Human</b> Identifying parts of a human-basic needs	<b>Dinosaurs</b> Rocks and fossils	<b>Material World</b> Materials	<b>The Blue Planet</b> Animals and their habitats	<b>Identity and survival-nutrition</b>	<b>Plants of the world</b> Plants, functions, soils	<b>Animals Habitats</b>	<b>Earth and Beyond</b> Light, materials, rocks, electricity, forces, magnets	<b>Being Human</b> circulatory system and importance of diet and exercise	<b>Dinosaurs</b> Discrete teaching Solids Liquids Gases	<b>Material World</b> Solids, liquids and gases	<b>The Blue Planet</b> Lifecycles
<b>Other links to Science</b>	Our World Weather Three Little Pigs Materials		Extreme World Seasonal Change and weather DT project- materials		Art Week- materials Suffolk- Plants and animals in their habitats		DT projects Food			DT project -sound - instruments		Electricity related DT project		Suffolk Plants and animals in the local environment

	Reception		Year 1		Year 2		Year 3		Year 4		Year 5		Year 6	
Cycle 2	Being Human All about me	Ancient World Dinosaurs Animals	Material World Materials	The Blue Planet Animals, identifying and naming animals, habitats, off spring	Identity and survival Basic needs	Plants of the World- plants locally	Animals Habitats	Earth and Beyond Light, materials, rocks, electricity, forces, magnets	Being Human Skeletons, teeth, nutritional needs and exercise	Ancient World Rocks and fossils	Material World Solids, liquids and gases	Blue Planet Life Cycles	Identity and survival Adaption, inheritance	Plants of the World – classifying plants, biomes
					Protecting the planet Reducing recycling Reusing								Off spring, reproduction, diet and exercise	
					Protecting the planet Climate change Our carbon footprint									
Other links to Science	Extreme World Seasonal Change and weather		Art Week- materials Suffolk- Plants and animals in the habitat		DT-Food				Volcanoes- states of matter		Suffolk Water cycle		Material Focus- DT- Electricity related DT project	
	DT project- materials								DT- Sound					

	Reception		Year 1		Year 2		Year 3		Year 4		Year 5		Year 6	
Cycle 3	Material World Materials	The Blue Planet Animals living in water	Identity and survival Basic needs, exercise and food	Plants of the World- plants, seeds, food chains. Comparison of plants	Animals Identifying and naming animals and offspring	Earth and Beyond Materials, Naming and grouping properties	Being Human Skeletons, teeth, nutritional needs and exercise	Ancient World Rocks Fossil	Material World Classification of states of matter, rocks, magnets	Blue Planet Habitats Light and dark	Identity and survival Adaptation inheritance	Plants of the World classifying plants, biomes	Animals Charles Darwin. Life cycles, evolution, classification, reproduction	Earth and Beyond Light and electricity, Earth, space and forces
			Protecting the planet Reducing recycling Reusing		Offspring reproduction, diet and exercise						Protecting the planet climate change Our carbon footprint			
Other links to Science	Suffolk- Living things in my local area		DT- food and materials		Our world- Weather and seasons Three little pigs- materials		Volcanoes- states of matter		Suffolk- water cycle	DT project- sound	Material Focus- DT- Electricity related DT project		Earth and Beyond Electricity, light, forces, Earth and Space	

	Reception		Year 1		Year 2		Year 3		Year 4		Year 5		Year 6	
Cycle 4	Identity and survival My body	Plants of the world Plants locally	Animals Identifying and naming animals and offspring	Earth and Beyond Materials-naming and grouping, properties	Being Human Identifying parts of a human, basic needs	Ancient World Dinosaurs and fossils	Material World Classification, states of matter, rocks, magnets	Blue Planet Habitats, Light and dark	Identity and survival Nutrition and digestion	Plants of the world Plants functions, soils, Comparison of plants in geographic areas	Animals Charles Darwin Life cycles, evolution, classification reproduction	Earth and Beyond Light, electricity earth and space forces	Being Human Circulatory system Importance of diet and exercise	Ancient World Solids, liquids and gases
	Protecting the planet Helping at home and school								Protecting the planet Reducing recycling reusing					
Other links to Science	Material focus Materials		Our World Weather and seasons	Extreme World Animals of Antarctica		Suffolk Water cycle		DT Food focus-Healthy eating		Extreme World Icebergs				
								DT- Sound						

<p><b>Key</b></p>	<p><i>Working Scientifically Practical scientific methods, processes and skills Opportunities to work scientifically are provided across all years so that the expectations in the Programme of study are met</i></p>	<p><i>Plants</i></p>	<p><i>Animals including humans</i></p>	<p><i>Properties and changes of materials</i></p>	<p><i>Seasonal change</i></p>	<p><i>Rocks</i></p>	<p><i>Light</i></p>	<p><i>Forces, magnets , electricity and Earth and space</i></p>	<p><i>Living things and their habitats including evolution and inheritance and the human impact on the environment</i></p>	<p><i>States of matter</i></p>	<p><i>Sound</i></p>
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