Science at NCPS 21-22: EYFS

The Statutory framework for the early years foundation stage (focus on Science), Understanding the World states:

Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension.

ELG: The Natural World

Children at the expected level of development will:

- Explore the natural world around them, making observations and drawing pictures of animals and plants;
- Know some of the similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class;
- Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

In planning and guiding what children learn, practitioners must reflect on the different rates at which children are developing and adjust their practice appropriately. Three characteristics of effective teaching and learning are:

- playing and exploring children investigate and experience things, and 'have a go'
- active learning children concentrate and keep on trying if they encounter difficulties, and enjoy achievements
- **creating and thinking critically** children have and develop their own ideas, make links between ideas, and develop strategies for doing things

Opportunities for Science in the common EYFS themes:

Introducing children to the foundational knowledge of science included in the Statutory Framework for the Early Years and Development Matters through common themes:

Opportunity	EYFS Theme Understanding the Word	Links to Year 1:	
Humans	 Demonstrate people who are familiar to them Learn about how to take care of themselves 	Animals including humans	
Animals excluding humans	 Name and describe animals that live in different habitats Describe different habitats 	Animals including humans	
Living things and their habitats	 Explore the plants in the surrounding natural environment Explore the animals in the surrounding natural environment Explore plants and animals in a contrasting natural environment 	Plants	
Materials, including changing materials	 Explore a range of materials, including natural materials Make objects from different materials including natural materials Observe, measure and record how materials change when heated and cooled Compare how materials change over time and in different conditions 	Everyday materials	
Seasonal Changes	 Play and explore outside in all seasons and in different weather Observe living things throughout the year 	Seasonal Changes	
Forces	 Explore how to change how things work Explore how wind can move objects Explore how objects move in water 		
Light	Explore shadowsExplore rainbows		
Sound	 Listen to sounds outside and identify the source Make sounds 		
Earth and space			

Science at Nanpean School 2021-22:

Term / Year	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1	Humans Understanding the World	Seasonal Changes (Autumn only)	Use of everyday materials	Rocks		Earth & Space	Living things and their habitats
Autumn 2	Animals excluding humans Understanding the World	Seasonal Changes (Winter only)			Electricity	Properties and changes of materials	Evolution & Inheritance
Spring 1	Seasonal Changes Understanding the World	Everyday Materials	Plants	Animals including humans	Sound	Forces	Animals including humans
Spring 2	Living things and their habitats Understanding the World	Seasonal Changes (Spring & Summer only)	Animals including humans	Forces and Magnets	States of Matter	Living things and their habitats	
Summer 1	Materials, including changing materials Understanding the World	Plants	Living things and their habitats	Light	Animals including humans	Animals including humans	Light
Summer 2		Animals including humans		Plants	Living things and their habitats		Electricity