



Learning in EYFS: What Science Subject Leaders Need to Know

The EYFS framework is structured very differently to the national curriculum as it is organised across seven areas of learning rather than subject areas. The aim of this document is to help subject leaders to understand how the skills taught across EYFS feed into national curriculum subjects.

This document demonstrates which statements from the 2021 Development Matters are prerequisite skills for science within the national curriculum. The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Three and Four-Year-Olds and Reception to match the programme of study for science.

The most relevant statements for science are taken from the following areas of learning:

- Communication and Language
- Personal, Social and Emotional Development
- Understanding the World

Taken from the Our Lady & St Benedict Catholic Academy EYFS LTP

Nursery	<p><u>The Natural World</u> Children will explore the natural world around them through Autumnal and listening walks in the school grounds and the forest area.</p> <p>Children will learn about how the season of Autumn changes from summer.</p> <p>Children will learn about how to stay safe on Bonfire Night.</p>	<p><u>The Natural World</u> Children will know how materials change when cooking, cooling and heating and will experiment with this through food tasting sessions.</p> <p>Children will collect Autumnal sticks and leaves to create an Autumn leaf.</p>	<p><u>The Natural World</u> Children will make collections of natural materials to investigate and talk about.</p> <p>Children will experiment with freezing and melting and make winter collages.</p> <p>Children will learn about the season of Winter and how it is different to Autumn.</p>	<p><u>The Natural World</u> Children will know that a butterfly comes from an egg. They will learn about the life cycles of different animals including frogs and chickens and have these animals in class.</p> <p>Children will know how to respect and care for living things.</p> <p>Children will learn about the season of Spring and how it is different to Winter.</p>	<p><u>The Natural World</u> Children will learn about which animals live in water and about their habitats and diets.</p> <p>Children will know that seeds can turn into plants. Children will begin to understand how it takes time to grow fruit and vegetables.</p> <p>Children will plant and grow a fruit/vegetable/herb in the playground</p> <p>Children will learn about the season of Summer and how it is different to Spring.</p>	<p><u>The Natural World</u> Children will explore and talk about forces including magnets, sinking and floating and stretching.</p> <p>Children will experiment with mixing colours.</p>
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<p>Reception</p>	<p><u>The Natural World</u> Children will know the names of body parts: shoulders, elbows, knees, ankles. Children will know the 5 senses. Children will deepen their Autumn knowledge.</p>	<p><u>The Natural World</u> Children will forage in the local environment for ingredients and resources to make creative works of art.</p>	<p><u>The Natural World</u> Children will deepen their knowledge of Winter. Children will know how the dinosaurs died. Children will look at volcanoes and how to make an explosive reaction.</p>	<p><u>The Natural World</u> Children will deepen their knowledge of Spring. Children will observe changes and growth of chicks. Children will know the life cycle of a chick in more detail and be able to order the phases of the cycle. Children will look at different wild animals and their habitats and some of their diets. Children will identify plastic and metal and consider the impact these materials have on their environment.</p>	<p><u>The Natural World</u> Children will know the names of the 4 seasons and weather associated with them. Children will know how to care for a plant and grow their own fruit. Children will explore floating and sinking and consider what materials have what effect on this.</p>	<p><u>The Natural World</u> Children will know that this time of year is Summer and have a deeper understanding of what happens in summer.</p>
<p>Links to Year 1</p>	<p><u>Plants</u></p>	<p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <ul style="list-style-type: none"> • ELG Links – The Natural World - Explore the natural world around them, making observations and drawing pictures of animals and plants. • 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. • Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. <p>Children will know how to care for a plant and grow their own fruit. Children will look at different wild animals and their habitats and some of their diets.</p>				
	<p><u>Animals Including Humans</u></p>	<p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores</p>				

		<ul style="list-style-type: none"> • ELG Links – The Natural World - 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. • Managing Self - Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices. <p>Children will look at different wild animals and their habitats and some of their diets. Children will observe changes and growth of chicks. Children will know the life cycle of a chick in more detail and be able to order the phases of the cycle.</p>
	<u>Everyday Materials</u>	<p>Describe the simple physical properties of a variety of everyday materials Compare and group together a variety of everyday materials on the basis of their simple physical properties. Distinguish between an object and the material from which it is made Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> <ul style="list-style-type: none"> • Links to ELGs – The Natural World - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. <p>Children will explore floating and sinking and consider what materials have what effect on this. Children will forage in the local environment for ingredients and resources to make creative works of art.</p>
	<u>Seasonal Changes</u>	<p>Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies.</p> <ul style="list-style-type: none"> • Links to ELGs – The Natural World - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. <p>Children will know that this time of year is Summer and have a deeper understanding of what happens in summer. Children will know the names of the 4 seasons and weather associated with them.</p>

Outcomes from Development Matters

Science		
Three and Four-Year-Olds	Communication and Language	• Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"
	Personal, Social and Emotional Development	• Make healthy choices about food, drink, activity and toothbrushing.

	<p>Understanding the World</p>	<ul style="list-style-type: none"> • 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. • Begin to make sense of their own life-story and family's history. • Explore how things work. • Plant seeds and care for growing plants. • Understand the key features of the life cycle of a plant and an animal. • Begin to understand the need to respect and care for the natural environment and all living things. • Explore and talk about different forces they can feel. • Talk about the differences between materials and changes they notice.
<p>Reception</p>	<p>Communication and Language</p>	<ul style="list-style-type: none"> • Learn new vocabulary. • Ask questions to find out more and to check what has been said to them. • Articulate their ideas and thoughts in well-formed sentences. • Describe events in some detail. • Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. • Use new vocabulary in different contexts.

Reception Continued	Personal, Social and Emotional Development		<ul style="list-style-type: none"> • Know and talk about the different factors that support their overall health and wellbeing: <ul style="list-style-type: none"> - regular physical activity - healthy eating - toothbrushing - sensible amounts of 'screen time' - having a good sleep routine - being a safe pedestrian
	Understanding the World		<ul style="list-style-type: none"> • Explore the natural world around them. • Describe what they see, hear and feel while they are outside. • Recognise some environments that are different to the one in which they live. • Understand the effect of changing seasons on the natural world around them.
ELG	Communication and Language	Listening, Attention and Understanding	<ul style="list-style-type: none"> • Make comments about what they have heard and ask questions to clarify their understanding.
	Personal, Social and Emotional Development	Managing Self	<ul style="list-style-type: none"> • Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.
	Understanding the World	The Natural World	<ul style="list-style-type: none"> • Explore the natural world around them, making observations and drawing pictures of animals and plants. • 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. • Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.