

Progression Guidance for Science from Early Years

Overview

Science in the EYFS Framework falls predominantly under the Understanding the World area of learning. In addition, aspects within Communication and Language are important to the teaching and learning of Science. The Characteristics of Effective Teaching and Learning are threaded through all aspects of learning and are the fundamental ways in which children within EYFS learn. During the Early Years, children should be developing knowledge, skills and understanding which will prepare them for the Year 1 curriculum.

The following table shows how the Statutory EYFS Framework Educational Programmes (curriculum) fit alongside Year 1 subject content and how Year 1 key skills, knowledge and understanding fit alongside relevant early learning goals (assessment). In addition, suggested key skills, knowledge and understanding for EYFS are provided. These are intended as guidance only. Individual schools should review their own curriculum and identify the appropriate skills, knowledge and understanding to be taught based on knowledge of their unique school context. In addition, it should be noted that the Early Learning Goals must not be used in any way to limit the wide variety of rich experiences that are crucial to a broad and balanced curriculum.

Science		
Year 1 Subject Content	EYFS Educational Programmes(Curriculum)	Suggested EYFS Key Skills, Knowledge and Understanding (Curriculum)
Plants	<p>Understanding the World</p> <p>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.</p>	<ul style="list-style-type: none"> Make simple predictions about what they think might happen Carry out simple investigations in a small group Explain why something happened and use this to predict what might happen next/change Identify, compare, classify and group a variety of places, objects, materials and living things Talk about changes, including the seasons Talk about their immediate environment and compare it to other environments
Animals, including humans		
Everyday Materials		
Seasonal Changes		

Enriching and widening children's vocabulary will support later reading comprehension.

Year 1 Key Skills, Knowledge and Understanding

Linked Early Learning Goals (Assessment)*

Working Scientifically:

- Ask simple questions and recognising that they can be answered in different ways
- Observe closely, using simple equipment
- Perform simple tests
- Identify and classify
- Use their observations and ideas to suggest answers to questions
- Gather and record data to help in answering questions

Plants:

- 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.

Animals, including humans:

- 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.
- Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).
- Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Everyday Materials:

- 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.
- 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.

Seasonal Changes:

- Observe changes across the four seasons.

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.

Listening, Attention and Understanding

- Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions.
- Make comments about what they have heard and ask questions to clarify their understanding.
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**The ELGs should not be used in any way to limit the wide variety of rich experiences that are crucial to a broad and balanced curriculum.*

- Observe and describe weather associated with the seasons and how day length varies.

Step by Step Guidance to Support Planning for Science Progression

1.	Establish where, when and how often, children are given opportunities to develop the Characteristics of Effective Teaching and Learning which will prepare them for accessing all subject areas in KS1.
2.	Establish where and when children are given opportunities to explore the identified skills, knowledge and understanding across EYFS which will prepare them for accessing Science in KS1.
3.	Map out where Science will have a predominant focus within EYFS teaching and learning. As well as direct teaching, you should also consider child-led learning and how the physical learning environment lends itself to Science.

4.	Look at the progression of your subject across school.	<p>Consider:</p> <ul style="list-style-type: none"> • What children cover in Early Years • When Science topics or skills are revisited later on in school • If the curriculum offer in Early Years provides the appropriate foundations for future learning • What specific skills and knowledge children are learning in Early Years related to Science • If these skills provide children with the foundations needed to apply these skills in Year 1 and beyond
5.	Map out the skills and knowledge children will achieve throughout their time in Early Years	<ul style="list-style-type: none"> • What skills, knowledge and understanding will children have in Science by the end: <ul style="list-style-type: none"> ○ Autumn term, Spring term and Summer term of Nursery? ○ Autumn term, Spring term and Summer term of Reception? • Is this learning progressively sequenced? • Does this provide the opportunity to integrate new knowledge into larger concepts? • Are links made between new and previous learning?
6.	Map out the vocabulary associated with Science children will learn at different points throughout Early Years. Does this vocabulary help to prepare children for the next phase?	
7.	Monitor the implementation of the long-term plan (set out by following steps 1-6).	<p>Consider:</p> <ul style="list-style-type: none"> • The opportunities children have to apply Science knowledge and skills and embed understanding through child-initiated learning • The opportunities children have to embed learning through different contexts, e.g. across multiple areas of the Early Years environment during play. • How adults support children to learn and understand specific vocabulary related to Science
8.	Assess the impact of the long term plan and implementation process.	<ul style="list-style-type: none"> • Are children able to demonstrate the skills (identified in step 1 and 2)? • Can children use and apply the taught vocabulary? • Are children confident with basic concepts related to Science by the end of Reception? • Do children enter Year 1 ready for the Science National Curriculum Programme of Study?