

# Science in EYFS

at Chad Vale  
Primary School



Whilst science isn't an official subject within the Early Years Framework, there are many vital learning opportunities which provide children with a foundation of key skills to later prepare them for learning in Key Stage 1 and beyond. Science in Early Years is introduced through activities that encourage every child to explore, problem solve, observe, predict, think, make decisions and talk about the world around them.

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

Science		
Three and Four-Year-Olds	Communication and Language	<ul style="list-style-type: none"> <li>• Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"</li> </ul>
	Personal, Social and Emotional Development	<ul style="list-style-type: none"> <li>• Make healthy choices about food, drink, activity and toothbrushing.</li> </ul>
	Understanding the World	<ul style="list-style-type: none"> <li>• Use all their senses in hands-on exploration of natural materials.</li> <li>• Explore collections of materials with similar and/or different properties.</li> <li>• Talk about what they see, using a wide vocabulary.</li> <li>• Begin to make sense of their own life-story and family's history.</li> <li>• Explore how things work.</li> <li>• Plant seeds and care for growing plants.</li> <li>• Understand the key features of the life cycle of a plant and an animal.</li> <li>• Begin to understand the need to respect and care for the natural environment and all living things.</li> <li>• Explore and talk about different forces they can feel.</li> <li>• Talk about the differences between materials and changes they notice.</li> </ul>
Reception	Communication and Language	<ul style="list-style-type: none"> <li>• Learn new vocabulary.</li> <li>• Ask questions to find out more and to check what has been said to them.</li> <li>• Articulate their ideas and thoughts in well-formed sentences.</li> <li>• Describe events in some detail.</li> <li>• Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen.</li> <li>• Use new vocabulary in different contexts.</li> </ul>

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

**Healthy eating –  
where does our  
food come  
from?**

**Recognise  
environments  
that are different  
from  
our own**

**Ask questions and  
give  
explanations**

**Explain how we can care for  
our environment and all  
living things**

**Oral  
hygiene**

**Daily weather  
discussions and  
comparison between  
seasonal changes**

**How do we provide a  
foundation of science  
skills and knowledge in our  
Early Years?**

**Explore changes in materials  
and differences between  
them. Experiment with  
changes in materials.  
(cooling, heating, melting,  
freezing, ice cubes, snow,  
cooking)**

**Understand how  
living  
things grow**

**Understand the key  
features of the life cycle  
of a plant/animal.**

**Explore the natural world  
using the 5 senses with hands  
on experiences.**

**Exploration and  
observations**

**Make observational drawings  
of the natural world including  
animals and plants.**

**Explore sinking and floating.  
Investigate which materials  
sink and float**

**Investigate shadows and light  
and dark.**

Daily weather and day of the week calendar in the mornings

Planting and caring for our herb garden

Lifecycle of a butterfly – caterpillar experience

Shadow drawing on the playground. Shadow puppet shows

Autumn and Spring senses walks

Shadow drawing on the playground. Shadow puppet shows

**What might these experiences look like?**

Discussions about holidays/families from other countries. Ski holidays vs summer holidays. Weather in those countries

Chick experience – lifecycle of a chick

Animals and their habitats. What animals might we see at the zoo? What animals might we see at the farm? What animals might we find in our garden?

Exploring the change of properties of mud in the mud kitchen or sand in the sand tray. (Cause and effect)

Using magnets to explore different magnetic and non-magnetic objects

Exploring different objects using senses that relate to different environments/seasons. E.g. pinecones, conkers, ice cubes, bark, rocks, pumpkins

