



## Northwick Park Academy Trust Science Progression Ladder

Science Progression	Communication and Language	Physical Development	Understanding the World
<b>3 and 4 year olds</b>	Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"	Make healthy choices about food, drink, activity and tooth brushing.	<ul style="list-style-type: none"> <li>- Uses all their senses in hands-on exploration of natural materials.</li> <li>- Explore collections of materials with similar and/or different properties.               <ul style="list-style-type: none"> <li>- Talk about what they see, using a wide vocabulary.</li> </ul> </li> <li>- Begin to make sense of their own lifestory and family's history.               <ul style="list-style-type: none"> <li>- Explore how things work.</li> </ul> </li> <li>- Plant seeds and care for growing plants.</li> <li>- Understand the key features of the life-cycle of a plant and 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>
<b>Reception</b>	<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 wellformed sentences.               <ul style="list-style-type: none"> <li>- Describe events in some detail.</li> </ul> </li> <li>- Use talk to work out problems and organise thinking and activities.</li> <li>- Explain how things work and why they might happen.</li> <li>- Use new vocabulary in different contexts.</li> </ul>	<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>* tooth brushing</li> </ul> </li> <li>* sensible amounts of 'screen time'               <ul style="list-style-type: none"> <li>* having a good sleep routine</li> <li>* being a safe pedestrian</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Explore the natural world around them. - 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>



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<b>Science Progression</b>	<b>Communication and Language/ Listening, Attention and Understanding</b>	<b>Personal, Social and Emotional Development/ Managing Self</b>	Understanding the World/ The Natural World
<b>Early Learning Goals</b>	- Make comments about what they have heard and ask questions to clarify their understanding.	- Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.	- 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.



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Science Progression	Questioning / Using secondary sources	Planning and Predicting	Investigating and Observing	Recording	
<b>Year 1</b>	Ask simple questions and recognise that they can be answered in different ways.	Suggest what might happen and ways to test ideas.	<p>Use simple equipment to observe closely.</p> <p>Identify and classify (name and group).</p> <p>Use his/her observations and ideas to suggest answers to questions.</p> <p>Make observations using appropriate senses (explore using the five senses).</p>	Communicate findings in simple ways, including tables.	Gather and record data to help in answering questions.
<b>Year 2</b>	<p>Ask simple questions about a given topic.</p> <p>With help, suggest questions/ ideas to recognise that they can be answered in different ways of scientific language (see the NC).</p> <p>Gather and record data to help in answering questions including from secondary resources of</p>	<p>Think about how to collect evidence.</p> <p>Suggest what might happen.</p> <p>Think about and discuss whether comparisons and simple tests are fair or unfair.</p>	<p>Perform simple and comparative tests.</p> <p>Follow simple instructions and equipment to observe closely including changes over time.</p> <p>Perform simple comparative tests.</p> <p>Identify group and classify.</p> <p>Use his/her observations and ideas to suggest answers to questions an ideas to suggest answers to questions noticing similarities, differences and patterns.</p>	Gather and record data to help in answering questions, including tables and graphs	Say whether what happened was what was expected and draw simple conclusions.



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	information.  Use first-hand experience and, with help, simple				
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