



**Holmesdale Infant School: Science Curriculum Overview and Knowledge and Skills Progression**

Science	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Nursery Continuous provision</b>	Autumn Season Natural Objects Root Vegetables Observing Changes (when ingredients are mixed) Differences between night and day Learning about the night sky Nocturnal animals Spring Season Plants/Seeds growing					
<b>Reception</b>	Sounds Autumn Season		Space Senses Seasonal Changes - Winter into Spring		Living Things Animals Caring for Living Things Seasonal Changes - Spring into Summer	




<b>Year 1</b>	<u><b>Materials</b></u> <ul style="list-style-type: none"><li>-Distinguish between an object and the material from which it is made.</li><li>-Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</li><li>-Describe simple physical properties of everyday materials.</li><li>-Compare and group materials based on their physical properties.</li></ul>	<u><b>Humans (Senses)</b></u> <ul style="list-style-type: none"><li>-Say which part of the body is associated with each sense.</li></ul>	<u><b>Plants</b></u> <ul style="list-style-type: none"><li>-Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</li><li>-Identify and describe the structure of a variety of common flowering Plants.</li></ul>	<u><b>Animals</b></u> <ul style="list-style-type: none"><li>-Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</li><li>-Describe and compare the structure of a variety of animals including pets</li><li>-Senses</li></ul>	<u><b>Humans</b></u> <ul style="list-style-type: none"><li>-Identify, name, draw and label the basic parts of the human body.</li></ul>
	<u><b>Seasonal Changes</b></u> <ul style="list-style-type: none"><li>-Observe changes across the four seasons.</li><li>-Observe and describe weather associated with the seasons and how day length varies.</li></ul>				



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Year 2	<u>Materials</u> -Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard. -Find out how the shapes of solid objects made from some materials can be changed by squishing, bending, twisting, and stretching.	<u>Material</u> Investigations	<u>Animals- including humans</u> -Animals, including humans, have offspring, which grow into adults. -Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene. -Find out about and describe the needs of animals, including humans for survival.	<u>Plants</u> -Observe and describe how seeds and bulbs grow into mature plants. -Find out and describe how plants need water, light and temperature to grow and stay healthy.		<u>Living things and their habitats</u> -Explore and compare the differences between things that are living, dead and things that have never been alive. -Identify most living things live in habitats and describe how different habitats provide the basic needs of animals and plants. -Identify and name a variety of plants and animals.



	<b>Holmesdale Infant School Skills Progression Subject area: Science</b>  <b>Key Skills: Scientific Enquiry, Practical Investigation, Communicating, Interpreting Evidence.</b>			
Scientific Skill	Nursery	Reception	Year 1	Year 2
<b>Scientific Enquiry</b>	ELG 40-60 months Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes		<ul style="list-style-type: none"> <li>- Asks questions raised by their own exploration of the world around them.</li> <li>- Draws on their everyday experiences to help answer questions.</li> <li>- Begins to use simple features to compare objects, materials and living things.</li> <li>- Asks people questions to find answers.</li> </ul>	<ul style="list-style-type: none"> <li>- Asks simple questions recognising that they can be answered in different ways.</li> <li>- Uses simple secondary sources to find answers.</li> </ul>
<b>Practical Investigation</b>	<ul style="list-style-type: none"> <li>- Use the local area for exploring both the built and the natural environment.</li> <li>- Provide opportunities to observe things closely through a variety of means, including magnifiers and photographs</li> <li>- Teach skills and knowledge in the context of practical activities, e.g. learning about the characteristics of liquids and solids by involving children in melting chocolate or cooking eggs</li> </ul>	<ul style="list-style-type: none"> <li>- Help children to notice and discuss patterns around them, e.g. rubbings from grates, covers, or bricks</li> <li>- Examine change over time, for example, growing plants, and change that may be reversed, e.g. melting ice</li> <li>- Help children to find out about the environment by talking to people, examining photographs and simple maps and visiting local places</li> </ul>	<ul style="list-style-type: none"> <li>- Responds to prompts by making some suggestions about how to find an answer or make observations.</li> <li>- Uses their senses and simple equipment to make observations.</li> </ul>	<ul style="list-style-type: none"> <li>- Observes changes over time.</li> <li>- Uses simple measurements and equipment to gather data and carry out simple tests.</li> </ul>



<b>Communicating</b>	<ul style="list-style-type: none"><li>-Introduce vocabulary to enable children to talk about their observations and to ask questions</li></ul>	<ul style="list-style-type: none"><li>- Encourage children to express opinions on natural and built environments and give opportunities for them to hear different points of view on the quality of the environment</li><li>- Use correct terms so that, for example, children will enjoy naming a chrysalis if the practitioner uses its correct name.</li><li>- Pose carefully framed open-ended questions, such as: "How can we...?" or "What would happen if...?"</li></ul>	<ul style="list-style-type: none"><li>-Begins to record data in simple templates provided for them.</li><li>-Responds to prompts to talk about what they have found out.</li></ul>	<ul style="list-style-type: none"><li>-With help, records and communicates findings in a range of ways and begins to use simple scientific language.</li><li>-Talks about what they have found out and how they found it out.</li><li>-Uses simple features to compare objects, materials and living things and with help, decides how to sort and group them</li></ul>
<b>Interpreting Evidence</b>			<ul style="list-style-type: none"><li>- Says what has changed when observing objects, living things or events.</li></ul>	<ul style="list-style-type: none"><li>-Says whether what happened was what they expected.</li><li>-With guidance, begins to notice patterns and relationships.</li></ul>

**Areas prioritised in 20-21 Academic year**