



# Y3 Science Overview 2019-2020

Science Activity	Desired Skills	Approaches to Developing Skills	Desired Knowledge and Understanding	Approaches Developing Knowledge and Understanding	Curricula Materials	Assessed through (T1 T2 T3)		
						Scientific Enquiry Planning & Presenting Critically Observing/ Classifying/ Evaluating Scientific Knowledge		
<b>Scientific Enquiry</b>	<ul style="list-style-type: none"> <li>Children to raise questions about the world around them</li> <li>Talk about criteria for grouping, sorting and classifying; and use simple keys</li> <li>Begin to look at for naturally occurring patterns and relationships and decide what data to collect to identify them</li> <li>To suggest simple ideas and suggest how to find things out</li> <li>Make and record a prediction before testing</li> <li>To explain a fair test and explain why it was fair?</li> <li>To make up a simple fair test to make comparisons</li> </ul>	<ul style="list-style-type: none"> <li>Create a topic Mind Map to encourage children to ask questions</li> <li>Introduce and model practical activities involving skills of investigating, contrasting, analysing, recording</li> <li>Make observations</li> <li>Review of investigations against criteria</li> <li>Out of the classroom learning experiences to support enquiry</li> </ul>	<ul style="list-style-type: none"> <li>Pupils should develop knowledge about the world around them and how they have an impact on that</li> <li>Identify that animals, including humans, need the right types and amount of nutrition and they get this nutrition from what they eat</li> <li>Observe rocks , including those in buildings and gravestones, exploring how and why they might have changed</li> <li>To begin to have an understanding of forces</li> <li>Notice that some forces need contact between two objects , but magnetic forces can act at a distance</li> <li>They should understand and use basic subject specific vocabulary related to the science topic</li> <li>To understand that magnets attract or repel each other and attract some materials and not others</li> <li>Be confident to ask questions and know where to research the answers</li> <li>To make predictions in a safe learning environment</li> <li>Confidently use simple scientific equipment to make observations</li> <li>Record and classify findings in simple ways</li> </ul>	<ul style="list-style-type: none"> <li>Teacher led presentations</li> <li>Opportunities for research modelled by Teacher</li> <li>Opportunities for children to act upon their own curiosity and research their own questions</li> <li>Research opportunities through home/school learning projects</li> <li>Planned opportunities for use of and access to varied resources</li> <li>School visits to places and organisations related to topic and learning</li> </ul>	<p><b>TERM1:</b> Animals Including Humans and Plants</p>	Most children will be able to... (working at)	Some children will not yet be able to... (working towards)	Some children are confidently able to... (exceeding)
<b>Planning and Presenting</b>	<ul style="list-style-type: none"> <li>To measure using different equipment and units of measure</li> <li>To record observations in different ways (labels, diagrams, charts)</li> <li>Describe what they have found using scientific vocabulary</li> <li>Identify differences, similarities or changes related to simple scientific ideas and processes</li> <li>To use straightforward scientific evidence</li> <li>Make accurate measurements using standard units</li> <li>To use relevant scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audiences</li> </ul>	<ul style="list-style-type: none"> <li>Teacher led lessons demonstrating skills of investigating, recording, analysing</li> <li>Modelling use of scientific vocabulary in comparisons, contrasts, investigations</li> <li>To use relevant scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audiences</li> <li>Planned practical activities to engage children in above activities</li> </ul>	<ul style="list-style-type: none"> <li>Observing changes over time</li> <li>Investigating habitats and environments</li> <li>Learning to compare and contrast</li> <li>Talking about what they have learnt and observed</li> <li>Begin to record data</li> </ul>	<p><b>TERM2:</b> Rocks</p>				
<b>Critically Observing/ Classification/ Evaluating</b>	<ul style="list-style-type: none"> <li>To ask relevant questions using correct scientific vocabulary</li> <li>To gather, record, classify and present data in a variety of ways to help answer questions</li> <li>To record findings using simple using drawings, labelled diagrams, charts and tables.</li> <li>To report findings from enquires, including oral and written explanations</li> <li>With support children should identify new questions arising from data, making predictions within or beyond the data they have collected and finding ways to improve what they have already done</li> </ul>	<ul style="list-style-type: none"> <li>Planned opportunities to observe, investigate and comment using scientific vocabulary based on topics and experiences</li> <li>Opportunities for children research their own line of enquiry</li> <li>To understand when and how secondary sources might help them to answer questions that cannot be answered through practical investigations</li> </ul>	<p><b>TERM3:</b> Light and Shadow</p>					
<b>Scientific Knowledge</b>	<ul style="list-style-type: none"> <li>To understand and use the correct scientific vocabulary related to the topic</li> <li>To observe, comment and ask questions about the world around them</li> <li>To connect ideas from previous learning and experiences</li> <li>To learn about change through observations and practical experiences and activities</li> <li>With support to set up an investigation</li> <li>To begin to gain an understanding of fair testing</li> <li>To know where to access information (books, internet sources)</li> </ul>	<ul style="list-style-type: none"> <li>Planned opportunities depending on topic such as deciding how to present findings via tally counting, graphs, and data analysis or measures</li> </ul>						
<b>Maths links</b>	<ul style="list-style-type: none"> <li>To use labels, diagrams and charts to record their observations</li> <li>To compare objects, plants, animals by size, height and weight</li> <li>To take accurate measurements using standard units, using a range of equipment , including thermometers</li> <li>To accurately interpret these measurements</li> </ul>	<ul style="list-style-type: none"> <li>Plan visits, opportunities to investigate with a group or partner</li> <li>Plan visits in the local environment</li> <li>Visit Parks, Museums, etc</li> </ul>						
<b>SMSC</b>	<ul style="list-style-type: none"> <li>Working with others of different religious, ethnic and socioeconomic backgrounds, according to given briefs wider knowledge of Y3 science curriculum</li> <li>Resolve conflicts and differing opinions should these arise</li> <li>Reflection on choices</li> <li>Investigating and offering views on ethical issues in topics studied</li> <li>Opportunities to and willingness to explore and understand scientific beliefs from a variety of cultural backgrounds</li> <li>Study of science, investigating with a team, knowledge of wider world, interview with older people, archaeologists, museum and exhibition trips</li> </ul>							