

Science Skills Progression Grid 2016/17

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Plan</p> <p>Planning and communication of sources</p>	<p><u>Creating and thinking critically</u></p> <p>Having their own ideas</p> <p>Choose and find new ways to do things</p> <p><u>Active learning</u></p> <p>Being involved and concentrating</p> <p>Keep trying</p> <p>Enjoy achieving what they set out to do</p>	<p>Ask simple questions</p> <p>Use simple charts for scaffolding to access and interpret data</p> <p>To recognise questions can be answered in different ways (verbal, written, drawing)</p> <p>Begin to make predictions with support</p>	<p>Asking questions</p> <p>Identify key features using scientific vocabulary</p> <p>Making suggestions about how to find things out</p> <p>Using a range of simple texts to find information</p> <p>Make predictions with support</p>	<p>Use pictures, writing, diagrams and tables directed by the teacher</p> <p>Use simple texts directed by the teacher to find information</p> <p>Discuss which equipment to use</p> <p>Select the appropriate format to record observations</p> <p>Make predictions based on previous learning</p> <p>Put forward ideas about how to find the answer to questions</p>	<p>Asking simple questions and begin to recognise they can be answered in different ways</p> <p>Plan and set up simple fair testing experiments explaining how the variable will be changed</p> <p>Start making predictions to inform further investigations</p>	<p>Plan different types of scientific enquiries – include how the variable is going to be controlled</p> <p>Begin to use previous test results to make predictions and set up further comparative and fair tests</p> <p>Start asking questions based on prior knowledge and observations of the real world</p>	<p>Plan different types of scientific enquiries – including recognising and controlling variables</p> <p>Use previous test results to make predictions and set up further comparative and fair tests</p> <p>Ask questions and develop a line of enquiry based on prior knowledge and observations of the real world</p>
<p>Do</p> <p>Enquiring and testing and obtaining and presenting evidence</p>	<p><u>Creating and thinking critically</u></p> <p>Develop knowledge and learn new things</p> <p>Play with what they know</p> <p>Willing to have a go</p> <p><u>Active learning</u></p> <p>Being involved and concentrating</p> <p>Keep trying</p> <p>Enjoy achieving what they set out to do</p> <p><u>Playing and exploring</u> Finding out & exploring</p> <p>Willing to have a go</p> <p>Using what they know in play</p>	<p>Performing simple tests</p> <p>Observing closely and using simple equipment</p> <p>Sorting objects into groups</p> <p>Use first hand experiences to answer questions</p>	<p>Using simple equipment provided to aid observation</p> <p>Comparing and classifying objects, living things or events</p> <p>Make observations relevant to their task.</p> <p>Begin to recognise when a test or comparison is unfair</p> <p>Use first hand experiences to answer questions</p>	<p>Carry out a fair test with support</p> <p>Recognise and explain what a fair test is</p> <p>With support, pupils begin to realise that scientific ideas are based upon evidence</p> <p>Make relevant observations using given equipment</p>	<p>Making careful and accurate observations with increasing precision</p> <p>Be able to vary a given factor with increasing accuracy during the investigation</p> <p>Pupils begin to realise that scientific ideas are based upon evidence</p>	<p>Making careful and accurate observations with precision.</p> <p>Start taking repeat readings where appropriate</p>	<p>Take measurements using a range of scientific equipment.</p> <p>Take repeat readings where appropriate</p>

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<p>Record</p> <p>Observing and recording</p>	<p><u>Creating and thinking critically</u></p> <p>Having their own ideas new ways to do things</p> <p>Use knowledge to learn new things</p> <p>Choose and find new ways to do things</p> <p><u>Active learning</u></p> <p>Being involved and concentrating</p> <p>Keep trying</p> <p>Enjoying achieving what they set out to do</p> <p><u>Playing and exploring</u></p> <p>Finding out & exploring</p> <p>Willing to have a go</p> <p>Using what they know in play</p>	<p>Communicate observations</p> <p>Make observations using appropriate senses</p> <p>Record observations (draw, verbal, write, ICT).</p>	<p>Responding to questions asked by the teacher</p> <p>Collect and record data (supported by the teacher)</p> <p>Suggest how they could record data to answer questions</p>	<p>Collect and record data</p> <p>Begin to choose suitable ways to record data to answer questions (tables, graphs, diagrams)</p>	<p>Gather, record, classify and present data in a variety of ways to answer questions.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.</p>	<p>Record data of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter, bar and line graphs.</p> <p>Start evaluating the reliability of the equipment and how it is used.</p>	<p>Record data of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter, bar and line graphs.</p> <p>Start selecting most appropriate method to record and present data.</p>
<p>Review</p> <p>Considering evidence and evaluating</p>	<p><u>Creating and thinking critically</u></p> <p>Have their own ideas new ways to do things</p> <p>Develop existing knowledge to learn new things</p> <p>Choose and find new ways to do things</p> <p><u>Active learning</u></p> <p>Being involved and concentrating</p> <p>Keep trying</p>	<p>Using observations and ideas to suggest answers to questions.</p> <p>Make simple comparisons and groupings</p> <p>Say whether what has happened is what they expected</p>	<p>Say what has happened</p> <p>Say whether what their observations show is what they expected and begin to suggest improvements to their work</p>	<p>Begin to offer explanations for what they have done using scientific language</p> <p>Begin to identify patterns in recorded measurements</p> <p>Suggest improvements in their work through evaluation</p>	<p>Report findings in a variety of ways: oral, written, presentations and displays.</p> <p>Use results to draw simple conclusions, make predictions and suggest improvements for further investigation of the variable.</p> <p>Identify differences, similarities or changes related the variable(s) investigated.</p> <p>Use simple scientific evidence to answer questions to support their findings.</p>	<p>Report and present findings including conclusions, reasons for results obtained, reliability of results (eg have averages been taken).</p> <p>Start to link back to the prediction made with reasons and evidence from data collected.</p> <p>Begin to identify further questions based on the results.</p>	<p>Report and present findings including conclusions, reasons for results obtained, reliability of results (eg have averages been taken).</p> <p>Identify and question scientific evidence that supports or refutes ideas, theories, results or arguments.</p> <p>Evaluate data and start to say why and how things have gone wrong in the experiment.</p>

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	<p>Enjoying achieving what they set out to do</p> <p><u>Playing and exploring</u></p> <p>Finding out & exploring</p> <p>Willing to have a go</p> <p>Using what they know in play</p>						
<p>Context</p>	<ul style="list-style-type: none"> • Growing plants • Life-cycles • Baby animals • Planets • Senses • Light and dark • Human body / healthy eating • Minibeasts • Weather (wind, snow, ice etc linked to continuous provision) 	<ul style="list-style-type: none"> • Basic human parts and senses • Animals • Seasonal changes • Materials • Planets • Plants • Life cycles 	<ul style="list-style-type: none"> • Uses of everyday materials • Humans • Animals • Living things and habitats • Growing things 	<ul style="list-style-type: none"> • Forces and magnets • Light • Rocks • Animals including humans • Plants 	<ul style="list-style-type: none"> • Animals including humans • Sound • Properties of materials • States of matter • All living things • Electricity 	<ul style="list-style-type: none"> • Earth and space • Properties and changes of materials • Animals including humans (time lines) • Forces • All living things and their habitats • Water and the water cycle. 	<ul style="list-style-type: none"> • Evolution and Inheritance • Animals including humans • Light • Electricity • Sex Ed