



Science Progression at St Minver School

Pupils will:	<u>Reception</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
<p>Use investigative approaches –</p> <p>Ask relevant questions and use different types of scientific enquiry to answer them.</p> <p>These include: observing changes over time, noticing patterns, grouping and classifying things, carrying out fair tests (controlled investigations) and finding things out using secondary sources of information.</p>	<p>Children will know about similarities and differences in relation to objects, materials and living things.</p> <p>They will be able to make observations of animals and plants and explain why some things occur, and talk about changes.</p>	<p>Pupils ask simple questions and recognise that they can be answered in different ways.</p> <p>Pupils respond to simple suggestions about how to test an idea.</p> <p>Pupils perform simple tests.</p> <p>Pupils observe closely, using simple equipment.</p> <p>Pupils identify and classify things.</p>	<p>Pupils gather and record their own data to help in answering questions. They have ideas about how to test.</p> <p>Pupils recognise the need to compare when testing things.</p>	<p>Pupils ask relevant questions and use different kinds of scientific enquiries to answer them (with support).</p> <p>Pupils set up simple practical enquiries and fair tests (with support).</p> <p>Pupils understand that fair tests seek to find the reasons to why things happen – the causes of effects.</p>	<p>Pupils understand that if we want to know if one thing affects another, then that is the only thing we must change, or we won't know what caused that effect.</p> <p>They can select the most relevant type of scientific enquiry to answer their questions and set up a fair test with limited support.</p> <p>Pupils make careful, systematic observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, e.g. thermometers.</p>	<p>Pupils independently carry out an investigation, where appropriate dependent/independent variables are effectively managed.</p> <p>Pupils know which variables to control in each investigation.</p> <p>Pupils take measurements with an appropriate level of precision. They can explain how to measure accurately.</p>	<p>Pupils make their own decisions about what observations to make, measurements to make. They can take measurements, using a range of scientific equipment, with increasing accuracy and precision.</p> <p>Pupils know when it's appropriate to take repeat readings.</p> <p>Pupils check if findings are reasonable by comparing with the findings of other groups.</p> <p>Pupils use test results to make predictions to set up further comparative and fair tests.</p>
<p>Communicate and Collaborate in Science – Carry out investigations and record results</p>	<p>Children answer 'how' and 'why' questions about their experiences and in response to events.</p>	<p>Pupils show an awareness of the need to record observations in Science.</p> <p>Pupils gather and record</p>	<p>Pupils begin to understand the importance of organising results, for example, into a table, to aid analysis and help them to answer questions.</p>	<p>Pupils understand the importance of organising results as or after they are gathered (some still supported).</p>	<p>Pupils gather, record, classify and present data in a variety of ways to help in answering questions (e.g. bar charts, tables, labelled diagrams and keys).</p>	<p>Pupils record data and results of increasing complexity, using scientific diagrams and labels, classification keys, tables and bar graphs.</p>	<p>Pupils record data and results of in a variety of more complex ways, considering the degree of trust, using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p>

<p>Work critically with evidence and think scientifically</p> <p>- Draw conclusions and create explanations</p>	<p>Children use past, present and future forms accurately when talking about events that have happened or are to happen in the future.</p>	<p>Pupils develop a vocabulary to talk about what they are doing. They can describe what they see.</p>	<p>Pupils use their observations and ideas to suggest answers to questions.</p> <p>Pupils make comparisons between the things they are testing. They can compare two or more things that they have tested or observed.</p>	<p>Pupils recognise that effects have causes.</p> <p>Pupils use their own ideas to make predictions before testing.</p> <p>Pupils use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</p> <p>Pupils describe relationships they have found (e.g. the ball bounces higher when I drop it from a greater height).</p>	<p>With support, they are beginning to use key scientific ideas to explain what they see.</p> <p>Pupils record and explain findings using simple but accurate scientific language.</p>	<p>Pupils can use key scientific ideas and concepts to offer explanations for what they have found out, to make predictions and to hypothesise about why something might be the way it is (all with support where needed).</p> <p>Pupils can report and present finding from enquires, including conclusions, explanations of results, in oral and written forms (e.g. displays or presentations).</p> <p>Pupils can read, spell, use and pronounce scientific vocabulary accurately.</p>	<p>Pupils can independently use key scientific ideas and concepts to offer explanations for what they have found out, to make predictions, and to hypothesise about why something may be the way it is.</p> <p>Pupils identify scientific evidence that has been used to support or refute arguments.</p> <p>Pupils recognise scientific ideas change and develop over time</p>
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