

Grayrigg CE School Knowledge and Skills Progression in Science

	Year 1	Year 2	Year3	Year 4	Year 5	Year 6
Planning Communication and Sources	<p>draw simple pictures</p> <p>talk about what they see and do</p> <p>use simple charts to communicate findings</p> <p>identify key features ask questions</p>	<p>describe their observations using some scientific vocabulary</p> <p>use a range of simple texts to find information</p> <p>suggest how to find things out</p> <p>identify key features ask questions</p>	<p>use pictures, writing, diagrams and tables as directed by their teacher</p> <p>use simple texts, directed by the teacher, to find information</p> <p>record their observations in written, pictorial and diagrammatic forms</p> <p>select the appropriate format to record their observations</p>	<p>record observations, comparisons and measurements using tables and bar charts</p> <p>begin to plot points to form a simple graph use graphs to point out and interpret patterns in their data</p> <p>select information from a range of sources provided for them</p>	<p>record observations systematically</p> <p>use appropriate scientific language and conventions to communicate quantitative and qualitative data</p> <p>select a range of appropriate sources of information including books, internet</p>	<p>choose scales for graphs which show data and features effectively</p> <p>identify measurements and observations which do not fit into the main pattern</p> <p>begin to explain anomalous data</p> <p>use appropriate ways to communicate quantitative data using scientific language</p>
Planning Communication and Sources	<p>test ideas suggested to them say what they think will happen Etc k</p> <p>use first hand experiences to answer questions</p> <p>begin to compare objects and living things</p>	<p>use simple equipment provided to aid observation</p> <p>compare 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>put forward own ideas about how to find the answers to questions</p> <p>recognise the need to collect data to answer questions</p> <p>carry out a fair test with support recognise and explain why it is a fair test</p> <p>with help, begin to realise that scientific ideas are based on evidence</p>	<p>with help, pupils begin to realise that scientific ideas are based on evidence</p> <p>show in the way they perform their tasks how to vary one factor while keeping others the same</p> <p>decide on an appropriate approach in their own investigations to answer questions</p> <p>describe which factors they are varying and which will remain the same and say why</p>	<p>use previous knowledge and experience combined with experimental evidence to provide scientific explanations</p> <p>recognise the key factors to be considered in carrying out a fair test</p>	<p>describe evidence for a scientific idea</p> <p>use scientific knowledge to identify an approach for an investigation</p> <p>explain how the interpretation leads to new ideas</p>

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Observing and Recording	<p>make observations using appropriate senses</p> <p>record observations</p> <p>communicate observations orally, in drawing, labelling, simple writing and using ICT</p>	<p>respond to questions asked by the teacher</p> <p>ask questions collect and record data (supported by the teacher)</p> <p>suggest how they could collect data to answer questions</p> <p>begin to select equipment from a limited range</p>	<p>make relevant observations</p> <p>measure using given equipment</p> <p>select equipment from a limited range</p>	<p>carry out measurement accurately</p> <p>make a series of observations, comparisons and measurements</p> <p>select and use suitable equipment</p> <p>make a series of observations and measurements adequate for the task</p>	<p>make a series of observations, comparisons and measurements with increasing precision</p> <p>select apparatus for a range of tasks</p> <p>plan to use apparatus effectively</p> <p>begin to make repeat observations and measurements</p> <p>measure quantities with precision using fine – scale divisions select and use information effectively</p> <p>make enough measurements or observations for the required task range systematically</p>	<p>measure quantities with precision using fine – scale divisions</p> <p>select and use information effectively</p> <p>make enough measurements or observations for the required task</p>
Considering Evidence and Evaluating	<p>make simple comparisons and groupings</p> <p>say what has happened</p> <p>say whether what has happened was what they expected</p>	<p>say what has happened</p> <p>say what their observations show and whether it was what they expected</p> <p>begin to draw simple conclusions and explain what they did</p> <p>begin to suggest improvements in their work</p>	<p>begin to offer explanations for what they see and communicate in a scientific way what they have found out</p> <p>begin to identify patterns in recorded measurements</p> <p>suggest improvements in their work</p> <p>evaluate their findings</p>	<p>predict outcomes using previous experience and knowledge and compare with actual results</p> <p>begin to relate their conclusions to scientific knowledge and understanding</p> <p>suggest improvements in their work, giving reasons</p>	<p>make predictions based on their scientific knowledge and understanding</p> <p>draw conclusions that are consistent with the evidence</p> <p>relate evidence to scientific knowledge and understanding</p> <p>offer simple explanations for any differences in their results</p> <p>make practical suggestions about how their working methods could be improved</p>	<p>make reasoned suggestions on how to improve working methods</p> <p>show how interpretation of evidence leads to new ideas</p> <p>explain conclusions, showing understanding of scientific ideas</p>