Great Ellingham and Rocklands Primary Schools

Great Ellingham Science Skills Progression Map

Planning & Predicting- pupils should be taught to:

Class 1	Class 2	Class 3 Yr2	Class 3 Yr3	Class 4	Class 5	Class 6
Reception Explore the natural world around them. Begin to make predictions and ask questions. Experience different types of scientific practical activities	**Year 1 & 2** Can ask simple questions Recognises that questions can be answered in different ways Experience different types of scientific enquiries, including practical activities; Talk about the aim of scientific tests they are working on.		**Year 3 & 4** Ask relevant questions and use different types of scientific enquiries to answer them Set up simple practical enquiries, including comparative and fair tests, making decisions about what observations to make, how long to make them for and the type of simple equipment that might be used; recognise when a simple fair test is necessary Talk about criteria for grouping, sorting and classifying;		**Year 5 & 6** Ask their own questions about scientific phenomena Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them; Choose the most appropriate equipment to make measurements and explain how to use it accurately;	

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Observing & Measuring- pupils should be taught to:

Class 1	Class 2	Class 3 Yr2	Class 3 Yr3	Class 4	Class 5	Class 6
Describe what they see, hear and feel whilst outside. Make observations and drawing pictures of animals and plants. Explore different materials freely, to develop their ideas about how to use them and what to make. Join different materials and explore different textures.	**Year 1 & 2** Observe closely, using simple equipment (e.g. magnifier) to gather data Perform simple tests Record simple data, Identify and classify using simple features to compare objects, materials and living things and, with help, decide how to sort and group them. Gather and record data in a variety of ways to help in answering questions such as in simple sorting diagrams, drawings, pictograms, tally charts, block diagrams and simple tables.		**Year 3 & 4** Make systematic and careful observations, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Gather, record, classify and present data in a variety of ways to help in answering questions Record findings using simple scientific language, drawings and labelled diagrams, keys, bar charts, and tables		**Year 5 & 6** Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate Decide how to record data from a choice of familiar approaches; Records data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. .	

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Great Ellingham Science Skills Progression Map

Concluding & Evaluating- pupils should be taught to:

Class 1	Class 2	Class 3 Yr2	Class 3 Yr3	Class 4	Class 5	Class 6
Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	**Year 1 & 2** Use their observations and ideas to suggest answers to questions. Begin to draw simple conclusions Observe changes over time, and, with guidance, begin to notice patterns and relationships. Ask people questions and use simple secondary sources to find answers. Talk about what they have found out and how they found it out. With help, record and communicate their findings in a range of ways and begin to use simple scientific language Read and spell scientific vocabulary at a level consistent with their increasing word reading and spelling knowledge at key stage 1;		**Year 3 & 4** Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Use results to draw simple conclusions and make predictions for new values suggest improvements and raise further questions Identify differences, similarities or changes related to simple scientific ideas and processes Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them Use straightforward scientific evidence to answer questions or to support their findings Use, read and spell scientific vocabulary correctly and with confidence, using their growing word reading and spelling knowledge;		**Year 5 & 6** Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations; Identify scientific evidence that has been used to support or refute ideas or arguments. Use test results to make predictions to set up further comparative and fair tests Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas; read, spell and pronounce scientific vocabulary correctly Recognise where secondary sources will be most useful to research ideas and begin to separate opinion from fact; Talk about how scientific ideas have developed over time.	