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|  | | KS1 | | Lower KS2 | | Upper KS2 | |
| Y1 | Y2 | Y3 | Y4 | Y5 | Y6 |
|  | Approaches to enquiry | ***Children should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions****, including (1) observing changes over a period of time, (2) noticing patterns, (3) grouping and classifying things, (4) carrying out simple comparative tests and (5) finding things out using secondary sources of information.* | | ***Children should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them****, including (1) observing changes over time, (2) noticing patterns, (3) grouping and classifying things, (4) carrying out simple fair tests and (5) finding things out using secondary sources of information.* | | ***Children should select the most appropriate ways to answer science questions using different types of scientific enquiry****, including (1) observing changes over different periods of time, (2) noticing patterns, (3) grouping and classifying things, (4) carrying out fair tests and (5) finding things out using a wide range of secondary sources of information.* | |
| **Working Scientifically** | Planning | • asking simple questions and recognising that they can be answered in different ways | | • asking relevant questions and using different types of scientific enquiries to answer them  • setting up simple practical enquiries, comparative and fair tests | | • planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary | |
| Observing | • observing closely, using simple equipment  • performing simple tests  • identifying and classifying | | • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers | | • taking measurements, using a range of scientific equipment with increasing accuracy and precision | |
| Recording | • gathering and recording data to help in answering questions | | • gathering, recording, classifying and presenting data in a variety of ways to help in answering questions  • recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables | | • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs  • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results in written forms such as displays and other presentations | |
| Concluding | • using their observations and ideas to suggest answers to questions | | • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions  • identifying differences, similarities or changes related to simple scientific ideas and processes  • using straightforward scientific evidence to answer questions or to support their findings | | • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results in written forms such as displays and other presentations | |
| Evaluating |  | | • using results to draw simple conclusions, make predictions for new values, suggest improvements, and raise further questions. | | • using test results to make predictions to set up further comparative and fair tests.  • identifying scientific evidence that has been used to support or refute ideas or arguments | |