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| Strands | FS ELGs: Understanding the World: 1. Children know about similarities and differences in relation to places, objects, materials and living things. 2. They talk about the features of their own immediate environment and how environments might vary from one another. 3. They make observations of animals and plants and explain why some things occur, and talk about changes. | By the end of Year 2 | By the end of Year 4  | By the end of Year 6  |
| Ideas and evidence |  | · They recognise why it is important to collect data to answer questions | · Pupils recognise that scientific ideas are based on evidence · Pupils describe how experimental evidence and creative thinking have been combined to provide a scientific explanation |
| Planning | • Pupils respond to suggestions about how to find things out and, with help, make their own suggestions about how to collect data to answer questions. • They use simple texts, with help, to find information | • Pupils respond to suggestions and put forward their own ideas about how to find the answer to a question. • They use simple texts to find information. • Where appropriate, they carry out a fair test with some help, recognising and explaining why | · In their own investigative work, they decide on an appropriate approach for example, using a fair test to answer a question. · Where appropriate, they describe, or show in the way they perform their task, how to vary one factor while keeping others the same. · Where appropriate, they make predictions. They select information from sources provided for them · When they try to answer a scientific question, they identify an appropriate approach. · They select from a range of sources of information. · When the investigation involves a fair test, they identify key factors to be considered. · Where appropriate, they make predictions based on their scientific knowledge and understanding. |
| Carrying out | • They use simple equipment provided and make observations related to their task. • They observe and compare objects, living things and events. | • They make relevant observations and measure quantities, such as length or mass, using a range of simple equipment | · They select suitable equipment and make a series of observations and measurements that are adequate for the task · They select apparatus for a range of tasks and plan to use it effectively. · They make a series of observations, comparisons or measurements with precision appropriate to the task. |
| Interpreting and evaluating | • They say whether what happened was what they expected | • They provide explanations for observations and for simple patterns in recorded measurements. • They suggest improvements in their work. | · They use their graphs to point out and interpret patterns in their data. · They begin to relate their conclusions to these patterns and to scientific knowledge and understanding. · They suggest improvements in their work, giving reasons. · They begin to repeat observations and measurements and to offer simple explanations for any differences they encounter. · They draw conclusions that are consistent with the evidence and begin to relate these to scientific knowledge and understanding. · They make practical suggestions about how their working methods could be improved. |
| Recording and presenting data | Pupils describe or respond appropriately to simple features of objects, living things and events they observe, communicating their findings in simple ways for example, talking about their work, through drawings, simple charts They describe their observations using scientific vocabulary and record them, using simple tables when appropriate | They record their observations in a variety of ways. They communicate in a scientific way what they have found out. | · They record their observations, comparisons and measurements using tables and bar charts. · They begin to plot points to form simple graphs. · They begin to communicate their conclusions with appropriate scientific language. · They record observations and measurements systematically and, where appropriate, present data as line graphs. · They use appropriate scientific language and conventions to communicate quantitative and qualitative data. |