



Roe Green Infant School Science – Skills Progression



	Reception	Year1	Year2
Approaches to enquiry	- Describe what they see, hear and feel whilst outside. - Explore the natural world around them. - Explore the natural world and understand the life cycle of a plant and animal. - To describe and talk about differences of materials talk about the changes. - Explore the natural world around them, making observations and drawing pictures of animals and plants. (ELG)	Children should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including: - observing changes over a period of time - noticing patterns - grouping and classifying things - carrying out simple comparative tests - finding things out using secondary sources of information	Children should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including: - observing changes over a period of time - noticing patterns - grouping and classifying things - carrying out simple comparative tests - finding things out using secondary sources of information
Asking questions	- Comments and asks questions about their familiar world. - Ask about where they live and the natural world. (This is taught discretely alongside the curriculum.)	Ask simple questions - Begin to shape questions using different question stems - Ask questions about how and why objects, materials and living things: - change - are similar or different to each other - connect with each other - are made or work - Suggest questions to investigate	Ask simple questions - Begin to shape questions using different question stems - Ask questions about how and why objects, materials and living things: - change - are similar or different to each other - connect with each other - are made or work - Suggest questions to investigate

Planning	- Find ways to solve problems - Test their ideas - Develop ideas of grouping - Make links and notice patterns (This is taught discretely alongside the curriculum.)	Recognise that questions can be answered in different ways - With support: - Suggest how to find things out - Identify changes to observe and measure - Identify patterns to observe and measure - Identify variables to change and measure - Identify sorting criteria - Suggest how to take measurements - Suggest next steps or a sequence of steps in a plan	Recognise that questions can be answered in different ways - With support: - Suggest how to find things out - Identify changes to observe and measure - Identify patterns to observe and measure - Identify variables to change and measure - Identify sorting criteria - Suggest how to take measurements - Suggest next steps or a sequence of steps in a plan
Collecting data	- Choose the resources they need - Handle equipment and tools effectively - Start to use simple lists (This is taught discretely alongside the curriculum.)	Observe closely, using simple equipment - Choose and use appropriate simple equipment to make observations - Use non-standard units to collect observations performing simple tests - Choose and use appropriate simple equipment with increasing accuracy to collect comparative data - Use non-standard units to collect data identifying and classifying - Sort objects by observable and behavioural features - Make comparisons between simple features gathering data to help in answering questions - Gather data to answer questions from a variety of sources including talking to people, simple books and electronic media, first hand observation and practical activity	Observe closely, using simple equipment - Choose and use appropriate simple equipment to make observations - Use non-standard units to collect observations performing simple tests - Choose and use appropriate simple equipment with increasing accuracy to collect comparative data - Use non-standard units to collect data identifying and classifying - Sort objects by observable and behavioural features - Make comparisons between simple features gathering data to help in answering questions - Gather data to answer questions from a variety of sources including talking to people, simple books and electronic media, first hand observation and practical activity

Presenting data	Create simple representations (This is taught discretely alongside the curriculum.)	Record data to help in answering questions - Talk about what has been found out and how - Record observations in word and pictures - Record observations and test results in simple prepared pictograms, tables, tally charts, bar charts and maps including ICT formats - Record sorting in sorting circles or tables	Record data to help in answering questions - Talk about what has been found out and how - Record observations in word and pictures - Record observations and test results in simple prepared pictograms, tables, tally charts, bar charts and maps including ICT formats - Record sorting in sorting circles or tables
Concluding	- Answer how and why questions about their experiences - Make observations of animals and plant and say why some things occur - Develop their own narratives and explanations by connection ideas - Build up vocabulary (This is taught discretely alongside the curriculum.) - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. (ELG) - 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. (ELG)	Use their observations and ideas to suggest answers to questions - Use simple scientific language to talk about observation or findings - Use results to answer the investigation question - Identify simple changes - Sequence changes - Say whether the change was expected - Identify similarities and differences - Make simple comparisons - Make links between two sets of observations - Identify simple patterns and talk about them - Say whether the pattern was expected - Identify simple causal relationships - Say if the relationship was expected	Use their observations and ideas to suggest answers to questions - Use simple scientific language to talk about observation or findings - Use results to answer the investigation question - Identify simple changes - Sequence changes - Say whether the change was expected - Identify similarities and differences - Make simple comparisons - Make links between two sets of observations - Identify simple patterns and talk about them - Say whether the pattern was expected - Identify simple causal relationships - Say if the relationship was expected
Evaluating	Give a feedback/answer about something they have observed. (This is taught discretely alongside the curriculum.)	- Say whether data was useful - Say whether an information source was useful Establish a conclusion based on observations. Make an observation.	- Say whether data was useful - Say whether an information source was useful Make an observation.