



Science Skills Progression

Skills Progression in Science at Foundation Stage

Early Learning Goals for Understanding of the World		Early Learning Goals for Physical Development	
Early Years Foundation Stage	The World	Health and Self-Care	
	- Children talk about the features of their own immediate environment and how environments might vary from one to another. - Children make observations of animals and plants and explain why some things occur, and talk about changes.	- Children talk about ways to keep healthy and safe. - Children manage their own basic hygiene and personal needs successfully, including dressing and going to the toilet independently.	

Knowledge Progression in Science at Key Stage 1

Year 1	- asking simple questions and recognising that they can be answered in different ways - observing closely, using simple equipment and measurement performing simple tests (beginning to) - identifying and classifying using their observations and ideas to suggest answers to questions (beginning to) - gathering, recording and communicating data and findings to help in answering questions. - use scientific language and read and spell age-appropriate scientific vocabulary - begin to notice patterns and relationships.
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Science Skills Progression

Year 2	• asking simple questions and recognising that they can be answered in different ways • observing closely, using simple equipment and measurement • performing simple tests (beginning to) • identifying and classifying • using their observations and ideas to suggest answers to questions (beginning to) • gathering, recording and communicating data and findings to help in answering questions. • use scientific language and read and spell age-appropriate scientific vocabulary • begin to notice patterns and relationships.
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Knowledge Progression in Science at Lower Key Stage 2

Year 3	• Making decisions, asking relevant questions and using different types of scientific enquiries to answer them • Setting up simple practical enquiries, comparative and fair tests • Making systematic and careful observations using notes and simple tables • Taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • 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, keys, bar charts, and tables • Reporting on findings from enquiries, using relevant scientific language, including oral and written explanations, displays or presentations of results and conclusions • Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • Identifying differences, patterns, similarities or changes related to simple scientific ideas and processes • Using straightforward scientific evidence to answer questions or to support their findings. • Begin to look for naturally occurring patterns and relationships • Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations WS1 making decisions, asking relevant questions and using different types of scientific enquiries to answer them
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Year 4	• Making decisions, asking relevant questions and using different types of scientific enquiries to answer them • Setting up simple practical enquiries, comparative and fair tests • Making systematic and careful observations using notes and simple tables • Taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • 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, keys, bar charts, and tables • Reporting on findings from enquiries, using relevant scientific language, including oral and written explanations, displays or presentations of results and conclusions • Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • Identifying differences, patterns, similarities or changes related to simple scientific ideas and processes • Using straightforward scientific evidence to answer questions or to support their findings. • Begin to look for naturally occurring patterns and relationships • Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations
Knowledge Progression in Science at Upper Key Stage 2	
Year 5	• planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • using test results to make predictions to set up further comparative and fair tests • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • identifying scientific evidence that has been used to support or refute ideas or arguments. • explore and talk about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically (beginning to) • recognise that scientific ideas change and develop over time.



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	• draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings. • Pupils should read, spell and pronounce scientific vocabulary correctly.
Year 6	• planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • using test results to make predictions to set up further comparative and fair tests • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • identifying scientific evidence that has been used to support or refute ideas or arguments. • explore and talk about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically (beginning to) • recognise that scientific ideas change and develop over time. • draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings. • Pupils should read, spell and pronounce scientific vocabulary correctly.