

Science - Skills Progression

Science Progression	Questioning and enquiring planning	Observing and measuring pattern seeking	Identifying and classifying	Investigating	Recording & reporting findings	Research
Year 1 Expected	Ask simple questions about the world around us.	Begin to observe closely, using simple equipment safely.	Identify and classify with some support.	Perform simple tests with support.	Gather and record data with some adult support, to help in answering questions.	To begin to use simple secondary sources to find answers.
	Begin to recognise that they can be answered in different ways (using the other objectives)	Use simple observations and ideas to suggest answers to questions. To observe simple changes over time and, with guidance, begin to notice patterns and relationships.	To begin to observe and identify, compare and describe. To begin to use simple features to compare objects, materials and living things and, with help, decide how to sort and group them.	To begin to discuss my ideas about how to find things out. To begin to say what happened in my investigation.	Begin to record simple data. Begin to record and communicate their findings in a range of ways. Show results in a simple table that the teacher has provided.	To begin to find information to help me from books and computers with help.
Year 2 Expected	Ask questions about the world around us. Begin to recognise that they can be answered in different ways (using the other objectives)	Observe closely, using simple equipment safely with increasing independence. Use observations and ideas to suggest answers to questions. Observe changes over time and, with guidance, begin to notice patterns and relationships.	Identify and classify. Observe and identify, compare and describe. Use simple features to compare objects, materials and living things and, with help, decide how to sort and group them.	Perform simple tests. To discuss my ideas about how to find things out. To say what happened in my investigation	Gather and record data to help in answering questions. Record simple data. Record and communicate their findings in a range of ways. Show results in a table that the teacher has provided.	Use simple secondary sources to find answers. Can find information to help me from books and computers with help.
Year 3 Expected	Ask some relevant questions and use different types of scientific enquiries to answer them. Begin to explore the relationships between living things and familiar environments. Begin to raise their own questions about the world around them. Begin to make some decisions about which types of enquiry will be the best way of answering questions.	Begin to make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment. Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them. Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used.	Begin to identify differences, similarities or changes related to simple scientific ideas and processes. Begin to talk about criteria for grouping, sorting and classifying and use simple keys. Begin to compare and group according to behaviour or properties, based on testing.	Set up some simple practical enquiries, comparative and fair tests. Begin to recognise when a simple fair test is necessary and help to decide how to set it up. Begin to think of more than one variable factor.	Gather, record, and begin to classify and present data in a variety of ways to help in answering questions. Begin to record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Begin to report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Begin to use notes, simple tables and standard units and help to	Begin to recognise when and how secondary sources might help to answer questions that cannot be answered through practical investigations.



Year 4 Expected	Ask relevant questions and use different types of scientific enquiries to answer them. Explore everyday phenomena and the relationships between living things and familiar environments. Raise their own questions about the world around them. Make some decisions about which types of enquiry will be the best way of answering questions.	Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment. Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them. Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used.	Identify differences, similarities or changes related to simple scientific ideas and processes. Talk about criteria for grouping, sorting and classifying and use simple keys. Compare and group according to behaviour or properties, based on testing.	Set up simple practical enquiries, comparative and fair tests. Recognise when a simple fair test is necessary and help to decide how to set it up. Can think of more than one variable factor.	decide how to record and analyse their data. Begin to record results in tables and bar charts. Gather, record, classify and present data in a variety of ways to help in answering questions. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Use notes, simple tables and standard units and help to decide how to record and analyse their data. Record results in tables and bar charts.	Begin to recognise when and how secondary sources might help to answer questions that cannot be answered through practical investigations.
Year 5 Expected	Begin to plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Begin to explore and talk about ideas, ask their own questions and analyse their findings. Begin to recognise some more abstract ideas and begin to recognise how these ideas help them to understand how the world operates.	Begin to take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate. Begin to identify patterns that might be found in the natural environment. Begin to 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.	Begin to use and develop keys and other information records to identify, classify and describe living things and materials.	Begin to use test results to make predictions to set up further comparative and fair tests. Begin to recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why. Begin to suggest improvements to my method and give reasons. Begin to decide when it is appropriate to do a fair test.	Begin to record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs. Begin to report and present findings from enquiries. Begin to decide how to record data from a choice of familiar approaches. Begin to choose how best to present data.	Begin to recognise which secondary sources will be most useful to research their ideas.



	Begin to recognise scientific ideas change and develop over time.	Begin to interpret data and find patterns.				
	Begin to select the most appropriate ways to answer science questions using different types of scientific enquiry.					
Year 6 Expected	Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Explore and talk about ideas, ask their own questions and analyse their findings. Begin to recognise more abstract ideas and begin to recognise how these ideas help them to understand how the world operates. Begin to recognise scientific ideas change and develop over time. Select the most appropriate ways to answer science questions using different types of scientific enquiry.	Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate. Identify patterns that might be found in the natural environment. 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. Can interpret data and find patterns.	Use and develop keys and other information records to identify, classify and describe living things and materials.	Use test results to make predictions to set up further comparative and fair tests. Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why. Suggest improvements to my method and give reasons. Decide when it is appropriate to do a fair test	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs. Report and present findings from enquiries. Decide how to record data from a choice of familiar approaches. Choose how best to present data.	Recognise which secondary sources will be most useful to research their ideas.