



Science skills progression - 2022



	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working scientifically	I can: 1)Ask simple questions 2)Use simple equipment to make observations 3)Carry out simple tests 4) Identify and classify things 5)Suggest what I have found out	To use the following practical scientific methods, processes and skills (adult support may be needed)	To use the following practical scientific methods, processes and skills with increasing confidence	To use the following practical scientific methods, processes and skills with increasing confidence	To use the following practical scientific methods, processes and skills with increasing confidence	To use the following practical scientific methods, processes and skills with increasing confidence	To use the following practical scientific methods, processes and skills with increasing confidence
Questioning and enquiring Planning		I can ask few simple questions about the world around you I can begin to use some different types of enquiry to answer questions	I can ask simple questions about the world around you I can begin to use different types of enquiry to answer questions	I can ask some relevant questions about the world around us I can use some different types of scientific enquiry to answer questions. I am beginning to decide which type of enquiry is best to answer my question	I can ask relevant questions about the world around us I can use different types of scientific enquiry to answer questions. I am beginning to decide which type of enquiry is best to answer my question	I am beginning to explore ideas and ask my own questions about scientific phenomena I am beginning to plan different types of scientific enquiry to answer questions I am beginning to decide which variables to control	I can explore ideas and ask my own questions about scientific phenomena I can plan different types of scientific enquiry to answer questions I can decide which variables to control
Observing and measuring Pattern seeking		I can begin to observe changes over time I can begin to say what I am measuring and what I am looking for I can measure using non- standard units and can begin to use simple standard units e.g. mm, cm, m, ml, l and C I can use some simple equipment e.g. microscope and/or magnifying glass to make observations I am beginning to notice patterns	I can observe changes over time I can say what I am measuring and what I am looking for I can measure using non- standard units and can begin to use simple standard units e.g. mm, cm, m, ml, l and C I can use simple equipment e.g. microscope and/or magnifying glass to make observations I am beginning to notice patterns	I can make systematic and careful observations to answer scientific questions I can decide what to observe and how long to collect observations I can take accurate measurements using standard units e.g. mm, cm, m, ml, l, C, seconds and minutes I can decide which equipment to use and use new equipment such as thermometers, dataloggers and rulers I can look for patterns and relationships	I can make systematic and careful observations to answer scientific questions I can decide what to observe and how long to collect observations I can take accurate measurements using standard units e.g. mm, cm, m, ml, l, C, seconds and minutes I can decide which equipment to use and use new equipment such as thermometers, dataloggers and rulers I can look for patterns and relationships	I can make accurate and precise measurements I can decide what to observe, how long to observe for and whether to repeat them I can take accurate and precise measurements using standard units such as N, g, kg, mm, cm, min, seconds, cm ² , ml and l. I can select equipment on my own and can explain how to use it accurately	I can make accurate and precise measurements I can decide what to observe, how long to observe for and whether to repeat them I can take accurate and precise measurements using standard units such as N, g, kg, mm, cm, min, seconds, cm ² , ml and l. I can select equipment on my own and can explain how to use it accurately
Investigating		I can begin to perform simple experiments I can begin to discuss my ideas I can begin to say what happened in an investigation	I can perform simple experiments I can discuss my ideas I can say what happened in an investigation	I can set up simple practical enquiries, including comparative and fair tests I am beginning to help decide what variables to change and what to keep the same	I can set up simple practical enquiries, including comparative and fair tests I can help decide what variables to change and what to keep the same	I can sometimes set up a range of comparative and fair tests I am beginning to explain which variables need to be controlled and why I am beginning to suggest improvements to my test,	I can set up a range of comparative and fair tests I can explain which variables need to be controlled and why I can suggest improvements to my test, giving reasons

						giving reasons	
Recording and reporting findings		<p>I can begin to collect simple data</p> <p>I can begin to record data in a table my teacher has provided</p> <p>I can begin to communicate my findings in a variety of ways</p>	<p>I can collect simple data</p> <p>I can record data in a table my teacher has provided</p> <p>I can communicate my findings in a variety of ways</p>	<p>I am beginning to collect data in a variety of ways, including labelled diagrams, bar charts and tables</p> <p>I am beginning to help decide how to record data, including orally</p> <p>I am beginning to communicate findings using scientific language</p>	<p>I can collect data in a variety of ways, including labelled diagrams, bar charts and tables</p> <p>I can help decide how to record data, including orally</p> <p>I can communicate findings using scientific language</p>	<p>I am beginning to record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs</p> <p>I am beginning to choose how best to present data, including orally</p> <p>I am beginning to communicate findings using detailed scientific language</p>	<p>I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs</p> <p>I can choose how best to present data, including orally</p> <p>I can communicate findings using detailed scientific language</p>
Identifying, grouping and classifying		<p>I am beginning to identify a variety of objects, materials and living things</p> <p>I can begin to sort, compare and group a range of objects, materials and living things</p>	<p>I can identify a variety of objects, materials and living things</p> <p>I can sort, compare and group a range of objects, materials and living things</p>	<p>I am beginning to talk about and identify differences and similarities in the properties or behaviours of living things, materials and other scientific phenomena</p> <p>I am beginning to identify simple changes related to simple scientific phenomena</p> <p>I am beginning to discuss criteria for grouping and sorting and can classify using simple keys</p>	<p>I can talk about and identify differences and similarities in the properties or behaviours of living things, materials and other scientific phenomena</p> <p>I can identify simple changes related to simple scientific phenomena</p> <p>I can discuss criteria for grouping and sorting and can classify using simple keys</p>	<p>I am beginning to use keys and other information records to classify and record living things, materials and other scientific phenomena</p> <p>I am beginning to develop my own keys and other information records to classify and describe</p> <p>I am beginning to identify changes related to scientific phenomena</p>	<p>I can use keys and other information records to classify and record living things, materials and other scientific phenomena</p> <p>I can develop my own keys and other information records to classify and describe</p> <p>I can identify changes related to scientific phenomena</p>
Research		<p>I can begin to find information to help me from books, computers and other familiar sources</p>	<p>I find information to help me from books, computers and other familiar sources</p>	<p>I can begin to decide when research will help me in my enquiry</p> <p>I am beginning to carry out simple research on my own</p>	<p>I can begin to decide when research will help me in my enquiry</p> <p>I can carry out simple research on my own</p>	<p>I am beginning to recognise which secondary sources will be most useful in my research</p> <p>I am beginning to carry out research independently</p>	<p>I can recognise which secondary sources will be most useful in my research</p> <p>I can carry out research independently</p>
Conclusions		<p>I can begin to talk about what I have found out</p> <p>I can begin to explain how I carried out my enquiry</p> <p>I can begin to suggest simple changes to my enquiry</p>	<p>I can talk about what I have found out</p> <p>I can explain how I carried out my enquiry</p> <p>I can suggest simple changes to my enquiry</p>	<p>I am beginning to draw simple conclusions based on the results of my enquiry</p> <p>I am beginning to answer questions using the results of my enquiry</p> <p>I am beginning to use my findings to make new predictions, suggest improvements and think of new questions</p> <p>I am beginning sometimes to think of cause and effect in</p>	<p>I am beginning to draw simple conclusions based on the results of my enquiry</p> <p>I am beginning to answer questions using the results of my enquiry</p> <p>I am beginning to use my findings to make new predictions, suggest improvements and think of new questions</p> <p>I can begin to think of cause and effect in my explanations</p>	<p>I am beginning to draw scientific, causal conclusions using the results of an enquiry to justify my ideas</p> <p>I am beginning to explain my conclusions using scientific knowledge and understanding</p> <p>I am beginning to distinguish between opinion and fact</p> <p>I am beginning to use my findings to make predictions and set up further enquiries</p>	<p>I can draw scientific, causal conclusions using the results of an enquiry to justify my ideas</p> <p>I can explain my conclusions using scientific knowledge and understanding</p> <p>I can distinguish between opinion and fact</p> <p>I can use my findings to make predictions and set up further enquiries</p>

				my explanations		I can begin to use abstract models to explain my ideas	I can begin to use abstract models to explain my ideas
Vocabulary		<p>I can begin to use simple scientific language</p> <p>I can begin to describe what I can see e.g. how long</p> <p>I can begin to compare e.g. something is larger or smaller</p>	<p>I can use simple scientific language</p> <p>I can describe what I can see e.g. how long</p> <p>I can compare e.g. something is larger or smaller</p>	<p>I am beginning to use some scientific language in my work</p> <p>I am beginning to describe my observations and findings</p> <p>I am beginning to use comparative and superlative descriptions e.g. longer/shorter than and longest/shortest</p> <p>I can begin to describe cause and effect</p>	<p>I can use some scientific language in my work</p> <p>I can describe my observations and findings</p> <p>I can use comparative and superlative descriptions e.g. longer/shorter than and longest/shortest</p> <p>I can begin to describe cause and effect</p>	<p>I am beginning to read, spell and pronounce scientific vocabulary correctly</p> <p>I am beginning to confidently use the correct scientific language when appropriate</p> <p>I am beginning to explain my ideas with scientific reasons</p> <p>I am beginning to use scientific conventions e.g. trends, rogue results and support prediction</p>	<p>I can read, spell and pronounce scientific vocabulary correctly</p> <p>I can confidently use the correct scientific language when appropriate</p> <p>I can explain my ideas with scientific reasons</p> <p>I can use scientific conventions e.g. trends, rogue results and support prediction</p>
Understanding		<p>I can say how science helps us in our daily lives</p> <p>I can say how science can be dangerous e.g. electricity can give you a shock</p>	<p>I can say how science helps us in our daily lives</p> <p>I can say how science can be dangerous e.g. electricity can give you a shock</p>	<p>I am beginning to know which things in science have made our lives better e.g. computers in schools, hospitals...etc</p> <p>I can begin to understand risk in science</p>	<p>I know some things in science which have made our lives better e.g. computers in schools, hospitals...etc</p> <p>I understand there is some risk in science</p>		<p>I can see how science is useful in lots of different ways</p> <p>I can say which parts of our lives rely on science</p> <p>I can explain the positive and negative effects of scientific developments</p>