

	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
Asking questions 	To ask questions relevant to their experiences and interests	Begin to ask simple questions and recognise that they can be answered in different ways.	Ask simple questions and recognise that they can be answered in different ways including use of scientific language from the national curriculum.	Begin to ask relevant questions and use different types of scientific enquiries to answer them.	Ask relevant questions and use different types of scientific enquiries to answer them.	Begin to Plan different types of scientific enquiries with support to answer questions, including recognising and controlling variables where necessary.	Plan different types of scientific enquiries to answer their own or others' questions, including recognising and controlling variables where necessary.
Making predictions 	Can share their ideas about what they observe	Can make predictions about what might happen with support.	Can make predictions about what might happen	Can begin to give reasons for predictions based on observations.	Can give reasons for predictions based on observations.	Can make generalised predictions involving trends (the higher the ramp the further the car will roll)	Can make generalised predictions involving trends and link this to scientific ideas.
Setting up tests 	Can explore cause and effect while in their play	Begin to perform simple comparative tests.	Perform simple comparative tests.	With some support, set up simple practical enquiries, comparative and fair tests.	Set up simple practical enquiries, comparative and fair tests.	Begin to set up different types of scientific enquiries to answer questions, including recognising and	Set up different types of scientific enquiries to answer questions, including recognising

						controlling variables with some support.	and controlling variables where necessary
<p>Observing and measuring</p> 	To be able to talk about what they can see and compare	Begin to use simple equipment to observe closely.	Use simple equipment to observe closely including changes over time.	Make careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers.	Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers .	Take measurements, using a range of scientific equipment, with increasing accuracy and precision.	Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
<p>Recording data</p> 	Will attempt to make marks that represent what they have found out	With the help of an adult, or in groups, gather and record data to help in answering questions. As a class,	Gather and record data to help in answering questions including from secondary sources of Information.	Gather, record, classify and present data in writing and verbally to help answer questions. Begin to record findings using simple scientific language, drawings, labelled	Gather, record, classify and present data in a variety of ways to help in answering questions. Record findings using simple scientific language, drawings,	Begin to record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

				diagrams, bar charts, and tables.	labelled diagrams, keys, bar charts, and tables.		
<p>Interpreting and communicating results</p> 	Can talk about what they observed and make their own conclusions in discussion	With the help of an adult, report and make conclusions based on what they have found out orally and consider what changes they could make	Report and make conclusions based on what they have found out orally and consider what changes they could make	Report on findings from enquiries, including oral and written explanations. Use results to draw simple conclusions, make predictions for new values.	Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral form with support such as displays and other presentations.	Report and present 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.
<p>Evaluating</p> 	Can change the way they engage with activities on their next try	With support, discuss what went well in the investigation.	Discuss what went well in the investigation.	With support decide what to do differently in an investigation.	Decide what to do differently in an investigation and begin to discuss why results might not be reliable.	Begin to decide what to do differently and decide which areas of the investigation are not reliable, with support.	Decide what to do differently and decide which areas of the investigation are not reliable.

<p>Vocabulary</p> 	<p>Notice, observe, question, experiment, sorting, grouping, conclusion, changes, draw, record, explore, ideas</p>	<p>Question, answer, equipment, identify, sort, group, map, describe</p>	<p>Observe, observing, classify, record, diagram, chart, data, compare, contrast</p>	<p>Research-relevant questions, comparative and fair testing, careful observation, thermometer, predictions, conclusions, record, drawings, labelled diagrams, bar chart, tables, differences, similarities, changes</p>	<p>Scientific enquiry, accurate measurements, data logger, data-gather and record, oral and written explanations, keys, evidence, improve secondary sources, guides, construct, interpret</p>	<p>Plan, variables, measurements, conclusion, prediction, comparative and fair test, patterns, observe over time, identify, classify, describe, display and present, evidence, support, explanations, graphs, bar graphs, tables, classification keys, labels, record data</p>	<p>Accuracy, precision, systematic, refute ideas, degree of trust, report and present, causal relationships, scatter graphs, line graphs, scientific diagrams, repeat readings</p>
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