



	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Asking and answering questions	Show curiosity about the world around them and begin to ask questions.	Ask simple scientific questions.	Ask scientific questions and begin to recognise that these can be answered in different ways.	Ask relevant questions and start to consider the appropriate type of enquiry to answer them.	Ask relevant questions and use different types of scientific enquiry to answer them.	Raise their own relevant questions using their scientific knowledge and plan different types of scientific enquiry to answer them.	Raise their own relevant questions using their scientific knowledge and plan different types of scientific enquiry to answer them.
Making predictions	Begin to say what might happen next in everyday play.	Begin to say what might happen in an investigation.	Begin to make predictions.	Make predictions and begin to give a reason.	Make predictions and give a reason using simple scientific vocabulary.	Make predictions and give a reason using scientific vocabulary.	Make predictions and give a reason using scientific vocabulary. Base predictions on findings from previous investigations.
Performing simple tests	Begin to test their ideas.	Perform a simple test e.g. fair test or comparative test (individually or in a group).	Set up simple practical enquiries, ensuring to follow steps in the correct order. Begin to recognise how to make a test fair (if a fair test is being conducted).	Set up different types of enquiry and begin to discuss these. Describe a fair test.	Make decisions about different enquiries, including recognising when a fair test is necessary and begin to identify variables.	Plan different types of enquiry, controlling variables where necessary.	Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

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Identifying and classifying	Sort and match objects by making observations.	Sort and group objects, materials and living things, according to simple observational features.	Decide how to group materials, living things and objects, noticing changes over time. Begin to observe patterns.	Talk about criteria for grouping, sorting and categorising, beginning to see patterns and relationships.	Identify similarities/differences/changes when talking about scientific processes. Use and begin to create simple keys to classify.	Use and develop keys to identify, classify and describe living things and materials.	Give reasons for categorising living things based on their characteristics. Identify and explain patterns seen in the natural environment.
Observing and measuring	Observe the world around them using their senses to look closely. Begin to use simple vocabulary to describe measure e.g. full/empty.	Observe objects, materials and living things and describe what they see. Use simple, non-standard equipment and measurements.	Observe closely, noticing similarities, differences and patterns. Observe changes over time. Use simple equipment to make observations e.g. hand lens, ruler, including changes over time.	Make careful observations, and where appropriate, take accurate measurement using standard units, using different equipment.	Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers.	Make systematic and careful observations. Take measurements using scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.	Make their own decisions about which observations to make. Choose the most appropriate equipment in order to take measurements, explaining how to use it accurately. Decide how long to take measurements for, checking results with additional readings.
Recording data	Begin to record their observations by drawing pictures e.g. of plants and animals	Begin to gather and record simple data to help in answering questions.	Gather data and begin to record with increasing accuracy.	Record their findings using scientific language and present in note form, writing frames, diagrams, tables and charts.	Choose appropriate ways to record and present information, findings and conclusions for different audiences (e.g. displays, oral or written explanations).	Record data and results of increasing complexity using scientific diagrams, labels, classification keys, tables, bar and line graphs and models.	Choose the most effective approach to record and report results, linking to mathematical knowledge.

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Interpreting and communicating results	Begin to talk about their observations, noticing things that are similar or different.	Talk about their findings and explain what they have found out.	Talk about their findings, in a range of ways, using simple scientific vocabulary.	Begin to identify changes, patterns, similarities and differences in data. Use scientific language when explaining what they have found out.	Identify changes, patterns, similarities and differences in data.	Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas.	Identify and explain causal relationships in data and identify evidence that supports or refutes their findings, selecting fact from opinion. Report and present findings from enquiries in oral and written forms such as displays and other presentations.
Drawing conclusions	With support, explain what they have found out.	Begin to explain what they have found out.	Use simple scientific language to explain what they have found out.	Draw a simple conclusion based on evidence from an enquiry or observation. Begin to identify how the enquiry could have been improved.	Use recorded data to make predictions, pose new questions and suggest improvements for further enquiries.	Use a simple mode of communication to justify their conclusions on a hypothesis. Discuss the validity of the methods. Begin to recognise how scientific ideas change over time.	Identify validity of conclusion and required improvement to methodology. Discuss how scientific ideas develop over time.
Using scientific evidence.				Use straightforward scientific evidence to answer questions or to support findings.	Use straightforward scientific evidence to answer questions or to support findings Use scientific evidence to support their findings.	Identify scientific evidence that has been used to support or refute ideas or arguments.	Identify and explain scientific evidence that supports or refutes ideas or arguments, selecting fact from opinion.