

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1	Seasonal changes Materials	Animals including humans	Rocks and soils		Earth and Space Forces	
Term 2	Seasonal changes		Animals including humans	Sound	Forces Materials	Evolution and Inheritance
Term 3	Seasonal changes Animals including humans		Animals including humans	Electricity		Light
Term 4	Seasonal changes Plants	Everyday materials	Light	States of Matter		Animals including humans
Term 5	Materials	Plants	Forces and magnets	Habitats and eco-systems		Electricity
Term 6	Seasonal changes	Living Things and their habitats	Plants	Animals: food chains,	Animals Habitats	Living things and habitats

KS1 Science Overview

National Curriculum Objectives:

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions
- gathering and recording data to help in answering questions

These skills should be applied through the study of Plants, Animals (including Humans), Everyday Materials (and their uses) and Seasonal Changes

	Year 1	Year 2
Term 1	<p style="text-align: center;">Seasonal Changes- runs throughout the year Skills: Exploring and using senses Performing simple tests Gathering and recording data to help in answering questions</p> <p style="text-align: center;">Everyday Materials Thinking about what is expected to happen Turning ideas into a form that can be tested Making observations and comparisons</p>	<p style="text-align: center;">Animals, including humans Making observations, measurements and comparisons Presenting findings in drawings and block graphs Using results to draw conclusions</p>
Term 2	<p style="text-align: center;">Seasonal Changes Skills: Exploring and using senses Performing simple tests Gathering and recording data to help in answering questions</p>	
Term 3	<p style="text-align: center;">Animals, including humans Bristol zoo workshop- carnivores, herbivores and omnivores Skills: Exploring and using senses Observing and describing living things, and communicating what happened in their work</p>	
Term 4	<p style="text-align: center;">Plants Turning ideas into a form that can be tested Making and recording observations Using results to communicate what happened and to draw conclusions.</p>	<p style="text-align: center;">Uses of everyday materials Thinking about what is expected to happen Making and recording observations and comparisons Deciding whether a test is fair</p>
Term 5	<p style="text-align: center;">Everyday Materials Thinking about what is expected to happen Turning ideas into a form that can be tested Making observations and comparisons</p>	<p style="text-align: center;">Growing Plants Making and recording observations and simple comparisons Presenting information in charts and tables Measure length in standard units</p>
Term 6	<p style="text-align: center;">Seasonal Changes Skills: Exploring and using senses Performing simple tests Gathering and recording data to help in answering questions</p>	<p style="text-align: center;">Living things and their habitats Turning ideas into questions that can be investigated Presenting results Drawing conclusions. Habitats (life cycles)</p>

KS2 Science Overview

National Curriculum Objectives:

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- 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 and, where appropriate, 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, 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, similarities or changes related to simple scientific ideas and processes
- using straightforward scientific evidence to answer questions or to support their findings.

These skills should be applied through the study of Animals (including humans), Rocks, Light, Forces and Magnets, States of Matter, Sound and Electricity

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- 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 presentation
- identifying scientific evidence that has been used to support or refute ideas or arguments.

These skills should be applied through the study of Living Things and their Habitats, Animals (including humans), Properties and Changes of Materials, Earth and Space, Forces, Evolution and Inheritance, Light and Inheritance.

	Year 3	Year 4	Year 5	Year 6
Term 1	<p>Rocks and Fossils Make observations about local rocks Identify and classify rocks Research how fossils are formed. Explore different soils and identify similarities and differences between them Set up a simple fair test on 6 rock samples</p>		<p>Earth and Space Making observations and recognising patterns in first hand and secondary data; representing data in graphs.</p> <p>Forces Fair and comparative tests linked to gravity</p>	
Term 2	<p>Animals including Humans Identifying and group animals according to differences and similarities Gather, record, classify and present data about different animal diets . Report on findings from enquiries about food types, including oral and written explanations, displays or presentations of results and conclusions</p>	<p>Sound Turning ideas into a form that can be investigated and making predictions Deciding whether the evidence is sufficient to support the prediction.</p>	<p>Forces Deciding what evidence should be collected when planning and carrying out a fair test; making measurements using a force-meter; looking for patterns in results, interpreting and suggesting explanations for these.</p> <p>Materials Making repeated observations and measurements and presenting these; identifying patterns in results; suggesting explanations for observations and conclusions in terms of scientific knowledge and understanding. Link to DT cookery project.</p>	<p>Evolution and Inheritance Making careful observations and measurements Using results to draw conclusions and suggesting explanations for these using scientific knowledge and understanding</p>
Term 3	<p>Animals including Humans Identifying and group animals according to differences and similarities Gather, record, classify and present data about different animal diets . Report on findings from enquiries about food types, including oral and written explanations, displays or presentations of results and conclusions</p>	<p>Electricity Using ideas about circuits to construct circuits and investigate how they work Using results to draw conclusions</p>		<p>Light (How we see things) Planning and carrying out a fair test – identify relevant factors Making observations and measurements Recognising when to repeat measurements Presenting results in line graphs Identifying patterns in data and results that do not appear to fit the pattern.</p>

<p>Term 4</p>	<p>Light (and shadows) Making and recording measurements and observations Drawing conclusions Suggesting explanations for observations and conclusions</p>	<p>States of Matter (Solids and Liquids) Deciding what apparatus to use Making and recording observations and measurements Drawing conclusions.</p>	<p>.</p>	<p>Animals including humans (Exercise and Nutrition) Making repeated measurements Representing data in bar charts and graphs, and interpreting these Using results to draw conclusions and to make further predictions</p>
<p>Term 5</p>	<p>Forces and Magnets Compare how different things move and group them Find out how far things move on different surfaces and gathering and record data to find answers their questions; Explore the strengths of different magnets and record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p>	<p>Living Things and their habitats Turning ideas into a form that can be tested, making a prediction Making observations Deciding whether the evidence supports the prediction and suggesting explanations in terms of their knowledge of science.</p>		<p>Electricity Chance to consolidate work in Year 4 and to carry out whole investigation relating to electric circuits e.g. asking a question, collecting repeat observations to answer the question, recording in a table, drawing conclusions from findings</p>
<p>Term 6</p>	<p>Investigating Plants Make systematic and careful observations about plant growth under different conditions and transportation of water Observe the different stages of plant life cycles over a period of time; Look for patterns in the structure of fruits that relate to how the seeds are dispersed.</p>	<p>Animals including humans (The Digestive System) Turning questions into a form that can be investigated and collecting sufficient evidence. Making observations, measurements and comparisons. Interpreting evidence.</p>	<p>Animals including humans (Growing Up) Repeating measurements Measure pulse rate Representing data in bar charts and graphs, and interpreting these Using results to draw conclusions.</p> <p>Living Things and their habitats (Life Cycles) Making observations and comparisons Drawing conclusions</p>	<p>Living Things and their habitats (Classification) Making observations Drawing conclusions, saying whether or not the evidence supports their prediction Suggesting explanations for conclusions, using scientific knowledge and understanding.</p>