

# Curriculum Overview – SCIENCE



## Cycle A – 2021/2022 - **EYFS**

	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>Reception</b>	Autumn changes and Harvest (how food grows)	Animal habitats / Light and Dark / Habitats	Forces / Winter / Earth and Planets	Environment	Materials for different purposes and properties	Classifying minibeasts Comparison Fossils / Summer
<b>Working Scientifically</b>	Ask simple questions and recognise that they can be answered in different ways. Observe closely, using simple equipment. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions.	Ask simple questions and recognise that they can be answered in different ways. Observe closely, using simple equipment. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions.	Ask simple questions and recognise that they can be answered in different ways. Observe closely, using simple equipment. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions.	Ask simple questions and recognise that they can be answered in different ways. Observe closely, using simple equipment. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions.	Ask simple questions and recognise that they can be answered in different ways. Observe closely, using simple equipment. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions.	Ask simple questions and recognise that they can be answered in different ways. Observe closely, using simple equipment. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions.

## Curriculum Overview – SCIENCE

### Cycle A – 2021/2022 – **KS1**



	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>KS1</b>	<b>Healthy Me</b> Importance of exercise, diet and good hygiene, building on the Who am I? topic in Year 1. (Y2)	<b>Our Local Environment</b> Seasonal Changes Living things, habitats, growing plants (Y2)	<b>Materials Monster</b> Properties and uses of materials (Y2)	<b>Squash, Bend, Twist &amp; Stretch</b> Seasonal Changes How shapes of objects can be changed under pressure (Y2)	<b>Little Master chefs</b> Healthy food choices, cooking (Y2)	<b>Young Gardeners</b> Seasonal Changes Living things and habitats (Y2)
<b>Working Scientifically</b>	Observe closely. Perform simple tests. To Identify and classify. Use observations and ideas to suggest answers to questions. Gather and record data in answering questions.	Ask simple questions and recognise that they can be answered in different ways. Observe closely, using simple equipment. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions. Gather and record data to help in answering questions.	Observe closely. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions. Gather and record data to help in answering questions.	Observe closely. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions. Gather and record data to help in answering questions.	Observe closely. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions. Gather and record data to help in answering questions.	Ask simple questions and recognise that they can be answered in different ways. Observe closely, using simple equipment. Perform simple tests. Identify and classify. Use observations and ideas to suggest answers to questions. Gather and record data to help in answering questions.

# Curriculum Overview – SCIENCE



## Cycle A – 2021/2022 – **LKS2**

	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>LKS2</b>	<b>Light and Shadows</b> Light, reflections and shadows (Y3)	<b>Food and Our Bodies</b> Nutrition, skeletons, muscles and joints (Y3)	<b>Forces and Magnets</b> Magnets and their uses, magnetic poles (Y3)	<b>The Big Build</b> Towers and bridges, animals as builders, famous engineers and architects and the structures they built. (Y4)	<b>How does your garden grow?</b> Different parts of plants, what plants need to live, water transportation in plants and pollination. (Y3)	<b>The Nappy Challenge</b> Gather, record, classify and present data in a variety of ways to help in answering questions. (Y3)
<b>Working Scientifically</b>	Set up simple practical enquiries, comparative and fair tests. Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment including thermometers and data loggers. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	Gather, record, classify and present data in a variety of ways to help in answering questions. Record findings using simple scientific language, drawings, keys, bar graphs and tables. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	Ask relevant questions and use different types of scientific enquiries to answer them. Set up simple practical enquiries, comparative and fair tests. Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment including thermometers and data loggers. Gather, record, classify and present data in a	Ask relevant questions and use different types of scientific enquiries to answer them. Set up simple practical enquiries, comparative and fair tests. Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Gather, record, classify and present data in a	Ask relevant questions and use different types of scientific enquiries to answer them. Set up simple practical enquiries, comparative and fair tests. Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment including thermometers and data loggers. Gather, record, classify and present data in a	Ask relevant questions and use different types of scientific enquiries to answer them. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Set up simple practical enquiries, comparative and fair tests. Use straightforward scientific evidence to answer questions or to support their findings.

	<p>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p>		<p>variety of ways to help in answering questions. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</p>	<p>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 results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identify differences, similarities or changes related to simple scientific ideas and processes. Use straightforward scientific evidence.</p>	<p>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 results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identify differences, similarities or changes related to simple scientific ideas and processes. Use straightforward scientific evidence to answer questions or to support their findings.</p>	
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# Curriculum Overview – SCIENCE



## Cycle A – 2021/2022 – **UKS2**

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>UKS2</b>	<p><b>Let's Get Moving</b> Children learn about forces and machines. They start with the force of gravity then study friction forces, including air and water resistance, before investigating levers and pulley systems in simple machines. <b>(Y5)</b></p>	<p><b>Light</b> We build on knowledge gained in LKS2. Children discover more about light travelling in straight lines, the formation of shadows and factors that affect the clarity and size of shadows. Later they learn about reflection and the colour spectrum. <b>(Y6)</b></p>	<p><b>Circle of Life</b> Children learn about the life cycles of various mammals, amphibians, fish and birds. They also learn the life process of reproduction in plants and animals. <b>(Y5)</b></p>	<p><b>Evolution and inheritance</b> Children learn how living things have changed over time. They learn that characteristics are passed from parent to their offspring and about adaptation. They also learn about evolution and the ideas of Charles Darwin and the work of Mary Anning. <b>(Y6)</b></p>	<p><b>Healthy Bodies</b> Children learn about moving nutrients around the body. They study the circulatory system in detail and build upon knowledge gained in LKS2 of the skeletal, muscular and digestive systems. We discover how lifestyle choices can impact upon the body systems of humans and other animals. <b>(Y6)</b></p>	<p><b>Growing up and Growing Old</b> Children describe the changes as humans develop to old age. They learn about the different stages of growth and development and move to focus upon changes experienced in puberty <b>(Y5)</b></p>
<b>Working Scientifically</b>	<p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables. <b>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Record data and results of increasing complexity using scientific diagrams</b></p>	<p><b>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables.</b> Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Record data and results of increasing complexity</p>	<p><b>Observe and compare life cycles of plants and animals in different habitats</b>  Take measurements, and record observations with increasing accuracy and precision, taking repeat readings when appropriate.  <b>Use test results and observations to make predictions and raise further</b></p>	<p><b>Observe and raise questions concerning adaptations of living things to their habitat</b>  <b>Use observations and comparisons to raise further pertinent lines of enquiry</b> Record observations using objective field notes, scientific diagrams <b>Identify scientific evidence that has been used to</b></p>	<p><b>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Record data and results of increasing</b></p>	<p>Planning different types of scientific enquiries to answer questions raised from research and comparison, including recognising and controlling variables where necessary. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p>

	<p><b>labels, tables, scatter graphs, bar and line graphs.</b> Use test results to make predictions to set up further comparative and fair tests. <b>Report, and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results,</b> in oral and written forms such as displays and other presentations.</p> <p><b>Identify scientific evidence that has been used to support or refute ideas or arguments.</b></p> <p><b>Identify how scientific ideas have changed over time</b></p>	<p>using scientific diagrams, labels, tables, scatter graphs, bar and line graphs. <b>Use test results to make predictions to set up further comparative and fair tests.</b> 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> <p>Identify scientific evidence that has been used to support or refute ideas or arguments.</p>	<p><b>pertinent questions and lines of enquiry</b> Report and present findings from enquiries, including conclusions, <b>causal relationships and explanations of and degree of trust in results,</b> in oral and written forms such as displays and other presentations.</p> <p>Identify scientific evidence that has been used to support or refute ideas or arguments.</p> <p>Identify how scientific ideas have changed over time</p>	<p><b>support or refute ideas or arguments.</b> <b>Identify how scientific ideas have changed over time</b></p>	<p>complexity using scientific diagrams and labels, tables, <b>scatter graphs,</b> bar and line graphs. Use test results to make predictions to set up further comparative and fair tests. <b>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.</b></p> <p><b>Identifying scientific evidence that has been used to support or refute ideas or arguments</b></p>	<p><b>Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results,</b> in oral and written forms such as displays and other presentations.</p> <p><b>Use results and conclusions to raise further lines of enquiry</b></p>
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