

SEETHING & MUNDHAM
PRIMARY SCHOOL

Seething and Mundham Primary School Science Curriculum

Intention:

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes

Aims:

The ensure that all pupils by the end of year 6:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Science Curriculum EYFS – YEAR 6

	EYFS	KS1	LKS2	UKS2
Animals Including Humans	<p>Children begin to learn about their bodies and senses. Children observe changes over time. Children will find out about healthy food choices.</p> <p>The statements for science are taken from the following areas of learning:</p> <ul style="list-style-type: none"> • Communication and Language • Personal, Social and Emotional Development <p>Communication and Language:</p> <ul style="list-style-type: none"> - Learn new vocabulary. - Ask questions to find out more and to check what has been said to them. - Articulate their ideas and thoughts in well-formed sentences. 	<p>Children begin to learn about their bodies and senses. Children observe changes over time, collect data, look for patterns and carry out investigations. Children will build an understanding that exercise makes the heart work harder and that it is an essential part of a healthy lifestyle. Children will find out about healthy food choices.</p> <p>KS1 Science National Curriculum To become proficient in Animals including Humans. Children can:</p> <ul style="list-style-type: none"> a identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense b identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals c identify and name a variety of common animals that are carnivores, herbivores and omnivores d describe and compare the structure of a variety of common animals (fish, 	<p>Children will develop specialised knowledge, skills and understanding in nutrition, muscles, bones and joints and conduct their own research.</p> <p>KS2 Science National Curriculum To become proficient in Animals including Humans. Children can:</p> <ul style="list-style-type: none"> a notice that animals, including humans, have offspring which grow into adults. b find out about and describe the basic needs of animals, including humans, for survival (water, food and air). c describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. d Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. e Identify that humans and some other animals have skeletons and muscles for support, protection and movement. 	<p>Children will research and collate information on growth, development, puberty and old age, and present it in a sensitive and logical way that is suited to their audience. Children will create sculptures and sketches that reflect the human body.</p> <p>KS2 Science National Curriculum To become proficient in Animals including Humans. Children can:</p> <p>Children can:</p> <ul style="list-style-type: none"> a describe the changes as humans develop to old age. b Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. c recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. d describe the ways in which nutrients and water are transported within animals, including humans. <p>To work scientifically. Children can:</p> <ul style="list-style-type: none"> a plan different types of scientific enquiries to answer questions,



Science Curriculum EYFS – YEAR 6

	<ul style="list-style-type: none"> - Describe events in some detail. - Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. - Use new vocabulary in different contexts. <p>Personal, Social and Emotional Development:</p> <p>Know and talk about the different factors that support their:</p> <ul style="list-style-type: none"> - overall health and wellbeing: - regular physical activity - healthy eating - Toothbrushing - sensible amounts of 'screen time' - having a good sleep routine - being a safe pedestrian 	<p>amphibians, reptiles, birds and mammals, including pets)</p> <ul style="list-style-type: none"> e notice that animals, including humans, have offspring which grow into adults f find out about and describe the basic needs of animals, including humans, for survival (water, food and air) g describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene <p>To work scientifically. Children can:</p> <ul style="list-style-type: none"> a ask simple questions and recognise that they can be answered in different ways b observe closely, using simple equipment whilst performing simple tests c identify and classify d use their observations and ideas to suggest answers to questions e gather and record data to help answering questions 	<ul style="list-style-type: none"> f describe the simple functions of the basic parts of the digestive system in humans. g identify the different types of teeth in humans and their simple functions. h construct and interpret a variety of food chains, identifying producers, predators and prey. <p>To work scientifically. Children can:</p> <ul style="list-style-type: none"> a asking simple questions and recognising that they can be answered in different ways. b observing closely, using simple equipment. c performing simple tests. d identifying and classifying. e using their observations and ideas to suggest answers to questions. f gathering and recording data to help in answering questions. g asking relevant questions and using different types of scientific enquiries to answer them. h Setting up simple practical enquiries, comparative and fair tests. i making systematic and careful observations and, where appropriate, taking accurate 	<p>including recognising and controlling variables where necessary.</p> <ul style="list-style-type: none"> b take measurements, using a range of scientific equipment, with increasing accuracy and precision, take repeat readings when appropriate. c record data and results of increasing complexity using scientific diagrams and labels, tables, scatter graphs, bar and line graphs. d use test results to make predictions to set up further comparative and fair tests. e 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. f identify scientific evidence that has been used to support or refute ideas or arguments.
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Science Curriculum EYFS – YEAR 6

			<p>measurements using standard units, using a range of equipment gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.</p> <ul style="list-style-type: none">j recording findings using simple scientific language, bar charts, and tables.k reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.l using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.m identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings.	
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Science Curriculum EYFS – YEAR 6

	EYFS	KS1	LKS2	UKS2
Plants	<p>Children will begin to understand and observe fruit, vegetables, flowers and trees. Children will grow their own seeds and keep them healthy.</p> <p>The statements for science are taken from the following areas of learning:</p> <ul style="list-style-type: none"> • Communication and Language • Understanding the World. <p>Communication and Language:</p> <ul style="list-style-type: none"> - Learn new vocabulary. - Ask questions to find out more and to check what has been said to them. - Articulate their ideas and thoughts in well-formed sentences. - Describe events in some detail. - Use talk to help work out 	<p>Children will understand and observe fruit, vegetables, flowers and trees. Children will grow their own seeds and keep them healthy. Children will learn why plants disperse their seeds and will plant cress seeds and grow a bean using hydroponics and watch and record what happens to them. Children will use art and design techniques, make and model their own seeds and then eat what they grow.</p> <p>KS1 Science National Curriculum To become proficient in plants.</p> <p>Children can:</p> <ol style="list-style-type: none"> a identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. b identify and describe the basic structure of a variety of common flowering plants, including trees. c observe and describe how seeds and bulbs grow into mature plants. d find out and describe how plants need water, light and a suitable temperature to grow and stay healthy <p>To work scientifically. Children can:</p>	<p>Children will become earth Plant Researchers. Children will observe and study bees and other insects. Children will learn how flowers turn into fruits and seeds to perpetuate the cycle of life and use this information to create art. Children will stage their own art exhibition of paintings, sculpture, collage and dance on the theme of Artful Flowers, Fruits and Seeds and perform to visitors.</p> <p>KS2 Science National Curriculum To become proficient in plants.</p> <p>Children can:</p> <ol style="list-style-type: none"> a identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. b explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. c investigate the way in which water is transported within plants. d explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. 	N/A



Science Curriculum EYFS – YEAR 6

	<p>problems and organise thinking and activities, and to explain how things work and why they might happen.</p> <ul style="list-style-type: none"> - Use new vocabulary in different contexts. <p>Understanding the World:</p> <ul style="list-style-type: none"> - Explore the natural world around them. 	<ul style="list-style-type: none"> a ask simple questions and recognise that they can be answered in different ways. b observe closely, using simple equipment. performing simple tests. c identify and classify. d use their observations and ideas to suggest answers to questions. 	<p>To work scientifically. Children can:</p> <ul style="list-style-type: none"> a ask relevant questions and use different types of scientific enquiries to answer them. b set up simple practical enquiries, comparative and fair tests. c make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. d gather, record, classify and present data in a variety of ways to help in answering questions. e record findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. f report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. g use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. h identify differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or 	
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Science Curriculum EYFS – YEAR 6

	EYFS	KS1	LKS2	UKS2
Living Things and their Habitats	<p>Children will begin to investigate habitats and have an understanding of food chains.</p> <p>The statements for science are taken from the following areas of learning:</p> <ul style="list-style-type: none"> • Communication and Language • Understanding the World. <p>Communication and Language:</p> <ul style="list-style-type: none"> - Learn new vocabulary. - Ask questions to find out more and to check what has been said to them. - Articulate their ideas and thoughts in well-formed sentences. - Describe events in some detail. - Use talk to help work out problems and 	<p>Children will collect specimens and sort them into categories. Children will investigate habitats and food chains. Children will design and make a bug hotel made up of different microhabitats to encourage a variety of creatures that they can investigate.</p> <p>KS1 Science National Curriculum To become proficient in living things and their habitats.</p> <p>Children can:</p> <ul style="list-style-type: none"> a explore and compare the differences between things that are living, dead, and things that have never been alive. b identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. <p>To work scientifically.</p> <p>Children can:</p> <ul style="list-style-type: none"> a ask simple questions and recognise that they can be answered in different ways. b observe closely, using simple equipment. 	<p>Children will explore classification. Children will group, identify and name a variety of living things. Children will learn about the 7 characteristics of a living thing; sort living things in a number of ways, make a dichotomous classification key to identify local invertebrates, make observational drawings and a group large-scale drawing of an insect and demonstrate their knowledge of classification keys to an audience.</p> <p>KS2 Science National Curriculum To become proficient in living things and their habitats.</p> <p>Children can:</p> <ul style="list-style-type: none"> a recognise that living things can be grouped in a variety of ways b explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. <p>To work scientifically.</p> <p>Children can:</p> <ul style="list-style-type: none"> a ask relevant questions and use different types of scientific enquiries to answer them. b set up simple practical enquiries, comparative and fair tests. c make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. d gather, record, classify and present data in a variety of ways to help in answering 	<p>Children will explore classification. Children will identify a range of living things as well as explore creatures further afield. Children will create an illustrated book on the theme of animal and plant life cycles. Children will explore the scientists David Attenborough, Jane Goodall. Children will enter their books into the 'Excellence in Scientific Illustration' awards.</p> <p>KS2 Science National Curriculum To become proficient in living things and their habitats.</p> <p>Children can:</p> <ul style="list-style-type: none"> a describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. b give reasons for classifying plants and animals based on specific characteristics c describe the differences in the life cycles of a mammal,



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	<p>organise thinking and activities, and to explain how things work and why they might happen.</p> <ul style="list-style-type: none"> - Use new vocabulary in different contexts. <p>Understanding the World:</p> <ul style="list-style-type: none"> - Explore the natural world around them. - Describe what they see, hear and feel while they are outside. - Recognise some environments that are different to the one in which they live. 	<ul style="list-style-type: none"> c perform simple tests. d identify and classify. e use their observations and ideas to suggest answers to questions f gather and record data to help in answering questions. 	<p>questions</p> <ul style="list-style-type: none"> e record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. f report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. g use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. h identify differences, similarities or changes related to simple scientific ideas and processes. use straightforward scientific evidence to answer questions or to support their findings. i 	<p>an amphibian, an insect and a bird. describe the life process of reproduction in some plants and animals.</p> <p>To work scientifically. Children can:</p> <ul style="list-style-type: none"> a plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. b record results using scientific diagrams and labels. c 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. d identify scientific evidence that has been used to support or refute ideas or arguments. e take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. f record data and results of increasing complexity using scientific diagrams and



				<p>labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>g use test results to make predictions to set up further comparative and fair tests.</p>
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Science Curriculum EYFS – YEAR 6

	EYFS	KS1	LKS2	UKS2
Everyday Materials	<p>Children will begin to explore different materials through investigations and explorations.</p> <p>The statements for science are taken from the following areas of learning:</p> <ul style="list-style-type: none"> • Communication and Language <p>Communication and Language:</p> <ul style="list-style-type: none"> - Learn new vocabulary. - Ask questions to find out more and to check what has been said to them. - Articulate their ideas and thoughts in well-formed sentences. - Describe events in some detail. - Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. - Use new vocabulary in different contexts. 	<p>Children will explore different materials and sort them into groups and write songs based on their properties. Children will explore the useful properties of materials with a range of investigations involving absorbency and flexibility. Children will explore a range of materials through investigations and explorations.</p> <p>KS1 Science National Curriculum To become proficient in everyday materials.</p> <p>Children can:</p> <ul style="list-style-type: none"> a distinguish between an object and the material from which it is made. b identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock. c describe the simple physical properties of a variety of everyday materials. d compare and group together a variety of everyday materials on the basis of their simple physical properties. e identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. f find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching g observe and describe how seeds and bulbs grow into mature plants. h find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. <p>To work scientifically. Children can:</p>	N/A	N/A



Science Curriculum EYFS – YEAR 6

		<ul style="list-style-type: none">a ask simple questions and recognise that they can be answered in different ways.b observe closely, using simple equipment.c performing simple tests.d identify and classifye us their observations and ideas to suggest answers to questionsf gather and record data to help in answering questions		
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Science Curriculum EYFS – YEAR 6

	EYFS	KS1	LKS2	UKS2
Light	N/A	N/A	<p>Children will create their own shadow puppet play using their knowledge and skills on light and shadows. Children will make a theatre and puppets for the show and conduct their own investigations on shadows, light and reflections.</p> <p>KS2 Science National Curriculum To become proficient in light.</p> <p>Children can:</p> <ul style="list-style-type: none"> a recognise that they need light in order to see things and that dark is the absence of light. b notice that light is reflected from surfaces III. recognise that light from the sun can be dangerous and that there are ways to protect their eyes. c recognise that shadows are formed when the light from a light source is blocked by an opaque object. d find patterns in the way that the size of shadows change. <p>To work scientifically.</p> <p>Children can:</p> <ul style="list-style-type: none"> a ask relevant questions and 	<p>Children will put together a portfolio for a lighting technician position. Children will develop the technical know-how as well as a sound understanding of the science behind the behaviour of light.</p> <p>KS2 Science National Curriculum To become proficient in light.</p> <p>Children can:</p> <ul style="list-style-type: none"> a recognise that light appears to travel in straight lines. b use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. c explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes. use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. <p>To work scientifically.</p> <p>Children can:</p> <ul style="list-style-type: none"> a plan different types of scientific enquiries to answer questions, including recognising and



Science Curriculum EYFS – YEAR 6

			<p>using different types of scientific enquiries to answer them.</p> <ul style="list-style-type: none">b set up simple practical enquiries, comparative and fair tests.c make systematic and careful observations and, where appropriate, taking accurate measurements using standard units.d gather, record, classify and present data in a variety of ways to help in answering questions.	<p>controlling variables where necessary.</p> <ul style="list-style-type: none">b take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.c record results using scientific diagrams and labels, tables, scatter graphs, bar and line graphs.d use test results to make predictions to set up further comparative and fair tests.e 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.f identify scientific evidence that has been used to support or refute ideas or arguments
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Science Curriculum EYFS – YEAR 6

	EYFS	KS1	LKS2	UKS2
Electricity	N/A	N/A	<p>Children will learn all about electrical circuits and test materials ability to conduct electricity.</p> <p>KS2 Science National Curriculum To become proficient in electricity.</p> <p>Children can:</p> <ul style="list-style-type: none"> a identify common appliances that run on electricity. b construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. c identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. d recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. e recognise some common conductors and insulators, and associate metals with being good conductors. <p>To work scientifically.</p> <p>Children can:</p> <ul style="list-style-type: none"> a ask relevant questions and use different types of scientific enquiries to answer them. b set up simple practical enquiries, comparative and fair tests. c Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, 	<p>Children will develop their knowledge of electricity whilst using motors, switches, bulbs and buzzers to make a stand-out display.</p> <p>KS2 Science National Curriculum To become proficient in electricity.</p> <p>Children can:</p> <ul style="list-style-type: none"> a associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. b compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches. c use recognised symbols when representing a simple circuit in a diagram. <p>To work scientifically.</p> <p>Children can:</p> <ul style="list-style-type: none"> a plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. b take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. c record results using scientific diagrams and labels, tables, scatter graphs, bar and line graphs d use test results to make predictions to set up further comparative and fair tests. e report and present findings from enquiries, including conclusions, causal relationships



Science Curriculum EYFS – YEAR 6

			<p>including thermometers and data loggers.</p> <ul style="list-style-type: none">d gather, record, classify and present data in a variety of ways to help in answering questions.e record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.f report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.g use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions .h identify differences, similarities or changes related to simple scientific ideas and processes.i use straightforward scientific evidence to answer questions or to support their findings.	<p>and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</p> <ul style="list-style-type: none">f identify scientific evidence that has been used to support or refute ideas or arguments.
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Science Curriculum EYFS – YEAR 6

	EYFS	KS1	LKS2	UKS2
Forces	N/A	N/A	N/A	<p>Children explore a range of forces and mechanisms to see if they can incorporate them into a number of theme park rides.</p> <p>KS2 Science National Curriculum To become proficient in forces.</p> <p>Children can:</p> <ul style="list-style-type: none"> a explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. b identify the effects of air resistance, water resistance and friction, that act between moving surfaces. c recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. <p>To work scientifically.</p> <p>Children can:</p> <ul style="list-style-type: none"> a plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. b take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. c record results using scientific diagrams and labels. d use test results to make predictions to set up further comparative and fair tests. e 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

Science Curriculum EYFS – YEAR 6

	EYFS	KS1	LKS2	UKS2
Seasonal Changes	<p>Children will begin to learn about weather, look at weather forecasts, observe weather.</p> <p>The statements for science are taken from the following areas of learning:</p> <ul style="list-style-type: none"> • Communication and Language • Understanding the World. <p>Communication and Language:</p> <ul style="list-style-type: none"> - Learn new vocabulary. - Ask questions to find out more and to check what has been said to them. - Articulate their ideas and thoughts in well-formed sentences. - Describe events in some detail. - Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. 	<p>Children will build on what they already know about weather, look at weather forecasts, observe weather and make collages about the seasons. Children will make shadows and make a class weather station that can measure rainfall, wind direction and temperature.</p> <p>KS1 Science National Curriculum</p> <p>To become proficient in Seasonal Changes.</p> <p>Children can:</p> <ul style="list-style-type: none"> a observe changes across the four seasons. observe and describe weather associated with the seasons and how day length varies. <p>To work scientifically.</p> <p>Children can:</p> <ul style="list-style-type: none"> a as simple questions and recognize that they can be answered in different ways. b observe closely, using simple equipment. perform simple tests. c identify and classify. d use their observations and ideas to suggest answers to questions 	N/A	N/A



- Use new vocabulary in different contexts.

Understanding the World:

- Explore the natural world around them.
- Describe what they see, hear and feel while they are outside.
- Understand the effect of changing seasons on the natural world around them.

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Science Curriculum EYFS – YEAR 6

	EYFS	KS1	LKS2	UKS2
Rocks	N/A	N/A	<p>Children will create a rock and fossil museum. Children will make exhibits, quizzes and activities for a popup museum.</p> <p>To be proficient in Rocks. Children can:</p> <ul style="list-style-type: none"> a compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. b describe in simple terms how fossils are formed when things that have lived are trapped within rock. c recognise that soils are made from rocks and organic matter <p>To work scientifically. Children can:</p> <ul style="list-style-type: none"> a ask relevant questions and using different types of scientific enquiries to answer them. b set up simple practical enquiries, comparative and fair tests. c make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. d Record findings using simple scientific language, drawings, labelled diagrams, keys. report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. identify differences, similarities or changes 	N/A



Science Curriculum EYFS – YEAR 6

			<p>related to simple scientific ideas and processes use straightforward scientific evidence to answer questions or to support their findings.</p>	
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	EYFS	KS1	LKS2	UKS2
Earth and Space	N/A	N/A	N/A	<p>Children will prove that the Earth moves round the sun; that the moon moves around the Earth; and that the seasons and day & night are all a consequence of these movements. Children will provide experimental evidence, not just current astrological thinking.</p> <p>To be proficient in Earth and Space. Children can:</p> <ul style="list-style-type: none"> a describe the movement of the Earth, and other planets, relative to the Sun in the solar system. describe the movement of the Moon relative to the Earth. b describe the Sun, Earth and Moon as approximately spherical bodies. c use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. <p>To work scientifically. Children can:</p> <ul style="list-style-type: none"> a Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. b take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. c record data and results of increasing complexity using scientific diagrams and labels, tables, scatter graphs, bar and line graphs. d use test results to make predictions to set



				<p>up further comparative and fair tests.</p> <ul style="list-style-type: none">e 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.f identify scientific evidence that has been used to support or refute ideas or arguments.
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Science Curriculum EYFS – YEAR 6

	EYFS	KS1	LKS2	UKS2
States of Matter	N/A	N/A	<p>Children will develop an understanding of all areas of states of matter, including how materials can change from one state to another, through a large range of simple practical enquiries.</p> <p>To be proficient in States of Matter. Children can:</p> <ul style="list-style-type: none"> a compare and group materials together, according to whether they are solids, liquids or gases. b observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C). c identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. <p>To work scientifically.</p> <ul style="list-style-type: none"> a Children can: b ask relevant questions and use different types of scientific enquiries to answer them. c set up simple practical enquiries, comparative and fair tests. d make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. e record findings using simple scientific language, drawings, labelled diagrams, keys, 	N/A



Science Curriculum EYFS – YEAR 6

			<p>bar charts, and tables.</p> <ul style="list-style-type: none">f Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.g use straightforward scientific evidence to answer questions or to support their findings.	
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Science Curriculum EYFS – YEAR 6

	EYFS	KS1	LKS2	UKS2
Sound	N/A	N/A	<p>Children will find out all they can about sound; how it travels, pitch and volume. Children will investigate materials to see which will provide the best insulation against sound.</p> <p>To be proficient in Sound. Children can:</p> <ul style="list-style-type: none"> a identify how sounds are made, associating some of them with something vibrating. recognise that vibrations from sounds travel through a medium to the ear. b find patterns between the pitch of a sound and features of the object that produced it. c find patterns between the volume of a sound and the strength of the vibrations that produced it. d recognise that sounds get fainter as the distance from the sound source increases. <p>To work scientifically. Children can:</p> <ul style="list-style-type: none"> a set up simple practical enquiries, comparative and fair tests. b make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. c gather, record, classify and present data in a variety of ways to help in answering questions. d record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. e report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. f Use results to draw simple conclusions, make predictions for new values, suggest improvements, and raise further questions. g identify differences, similarities or changes related to simple 	N/A



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			<p>scientific ideas and processes use straightforward scientific evidence to answer questions or to support their findings.</p>	
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