

Clifton All Saints Academy

Curriculum Subject Map

Science Overview

KS	Class	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	YR	Beware of the Bears	Let's Celebrate	Marvellous Me	Walking with dinosaurs	Around the World	Telling a Tale
KS1	Y1	Plants	Materials / Let's Build	Animals / Pets	Marvellous materials	Seasonal changes	Animals / humans
	Y2	Healthy Animals	Habitats	Materials Matter	Squash Bend and Twist	Plants, ready steady grow	Habitats, gardens and allotments
KS2	Y3	Rocks and soils	Light and shadow	Forces and magnets	Keeping healthy	Plants, roots and shoots	Plants, flowers fruits and seeds
	Y4	<u>States of matter</u>	Sound	<u>Animals and humans</u>	Inventors and scientists	Living things and habitats	<u>Electricity</u>
	Y5	Forces	The Earth and Space	Famous scientist study	Properties of materials	Animals	Living things and habitats / life cycles
	Y6	Living things and habitats	Light	Electricity	Evolution and inheritance	The science of sport	Animals including humans

AUTUMN 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
EYFS	<p>To explore their natural environment and resources.</p> <p>Understanding the World objective.</p> <p>1. Use all their</p>	<p>To explore their new environment.</p> <p>To talk about what they can hear, see, smell and feel, using lens and sentences.</p> <p>Understanding the World objective.</p>	<p>To understand what harvest is and what season it takes place in.</p> <p>To explore the ingredients of porridge and how they change.</p> <p>To talk about the texture and taste of porridge</p>	<p>To notice the autumnal changes within their environments</p> <p>To explore different food items and use talk to describe them.</p> <p>Understanding the World objective.</p>	<p>To look at photos of a polar bear's habitat and a brown bears habitat.</p> <p>To talk about what the habitats may look and feel like.</p> <p>Understanding the World objective.</p>	<p>To explain why the ice is melting as it travels across the ocean.</p> <p>Understanding the World objective.</p> <p>1. To understand the effect of</p>

	<p>senses in hands-on exploration of natural materials. 3-4</p> <p>(Stay and play sessions X2 Children only in attendance for 2 hours on during both sessions)</p>	<p>1.Explore the natural world around them. REC</p> <p>2.Talk about what they see, using a wide vocabulary 3-4</p> <p>(Settling in sessions Part time table No direct teaching Observation and assessment.)</p>	<p>Understanding the World objective.</p> <p>1.To understand the effect of changing seasons on the natural world around them.</p> <p>2.Talk about the differences between materials and changes they notice. 3-4</p>	<p>1.To understand the effect of changing seasons on the natural world around them.</p> <p>2.Talk about what they see, using a wide vocabulary 3-4</p>	<p>1.Talk about what they see, using a wide vocabulary 3-4</p>	<p>changing seasons on the natural world around them.</p>
<p>Y1</p>	<p>To examine, draw and taste a range of fruits and vegetables that could be grown in a garden.</p>	<p>To share knowledge about potatoes, including how they are grown and in what forms we can eat them</p>	<p>To share knowledge about gardens and gardeners and set up a garden.</p>	<p>To explore the school garden and examine the plants.</p>	<p>To find flowering plants and carefully examine them.</p>	<p>To note a variety of trees and discuss their similarities and differences.</p>
<p>Y2</p>	<p>i) notice that animals, including humans, have offspring which grow into adults Asking simple questions.</p> <p>ii) Using their observations and ideas to suggest answers to questions.</p>	<p>iii) find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>iv) Using their observations and ideas to suggest answers to question</p>	<p>ii) describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene Gathering and recording data to help in answering questions</p>			

Y3	Compare and group together different kinds of rocks on the basis of appearance and simple physical properties. Working Scientifically 1. Ask relevant questions and use different types of scientific enquiries to answer them. 2. Make systematic and careful observations. 3. Record findings using simple scientific language	Group together different kinds of rocks on the basis of appearance and simple physical properties. Working Scientifically 1. Set up simple practical enquiries and comparative and fair tests. 2. Make systematic and careful observations. 3. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	Compare and group together different kinds of rocks on the basis of appearance and simple physical properties. Working Scientifically 1. Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment. 2. Gather, record, classify and present data in a variety of ways to help answer questions.	Describe in simple terms how fossils are formed when things that have lived are trapped within rock. Working Scientifically 1. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	Recognise that soils are made from rocks and organic matter. Working Scientifically 1. Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment. 2. Gather, record, classify and present data in a variety of ways to help answer questions. 3. Identify differences, similarities or changes related to simple scientific ideas and processes. 4. Use straightforward scientific evidence to answer questions or to support findings.	Describe in simple terms how fossils are formed when things that have lived are trapped within rock. Working Scientifically 1. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
Key Vocab						
Y4	Solid, Liquid or Gas? To compare and group materials together, according to whether they are solids, liquids or gases by sorting and	Investigating Gases To compare and group materials together, according to whether they are solids, liquids or gases by	Heating and Cooling To observe that some materials change state when they are heated or cooled, and measure or research the temperature at which	Wonderful Water To observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in	Evaporation Investigation To associate the rate of evaporation with temperature by investigating the effect of temperature on drying washing. To make	The Water Cycle To identify the part played by evaporation and condensation in the water cycle by

	describing materials into solids, liquids and gases	investigating gases and their uses.	this happens in degrees Celsius (°C) by investigating how heating and cooling can change a material's state	degrees Celsius (°C) by exploring how water can change its state to a solid, liquid or a gas	systematic, careful and accurate observations and measurements and report on findings from enquiries by displaying results and conclusions by investigating the effect of temperature on drying washing.	creating a model of the water cycle.
Y5	<p>Gravity - A rare and important meteorite has landed in a remote part of Europe. The Natural History Museum recovery team is on its way to retrieve it, but they need a remote back up team with forces expertise. Are you up for the challenge?</p> <p>Science Objectives i) Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Identify scientific evidence that has been used to support or refute ideas or arguments 	<p>Parachuting In The recovery team needs to parachute in to begin the process of repatriation - but which parachute is best? Your remote team needs to work out the solution.</p> <p>Science Objectives i) Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. ii) Identify the effects of air resistance, that acts between moving surfaces.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Take measurements, using a range of scientific equipment, 	<p>The meteorite is in a big hole - how will the recovery team get it out in order to retrieve it? Take a masterclass in levers and pulleys in order to send a brief to your forces on the ground.</p> <p>Science Objectives i) Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. iii) Recognise that some mechanisms, including levers and pulleys, allow a smaller force to have a greater effect.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Take measurements, using a range of scientific equipment, 	<p>The meteorite is on its way, but the rest of the team are on bikes - and the gears are not labelled. Can you help them to work out which gears will help them on which terrain?</p> <p>Science Objectives i) Recognise that gear mechanisms allow a smaller force to have a greater effect. ii) Identify the effects of friction, that acts between moving surfaces.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Record data and results of increasing complexity using scientific diagrams and labels, tables, scatter graphs, bar and line graphs. 3. Use test results to make predictions to set up further comparative and fair tests. 	<p>Your team has reached a three way split of paths, all with differing surfaces. Can you recommend the path that won't be too fast or too slow, but just right?</p> <p>Science Objectives i) Identify the effects of friction that acts between moving surfaces.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. 3. Record data and results of increasing complexity using scientific diagrams and labels, tables, scatter graphs, bar and line graphs. 4. Use test results to make predictions to set up 	<p>Teaching</p> <ul style="list-style-type: none"> • Investigate the effect ground friction has on movement. • Identify an appropriate amount of friction for the safe onward journey of a bike. • Use results to make further predictions and suggest further investigation. <p>Activities</p> <ol style="list-style-type: none"> 1. Investigate the effect of ground friction on the force needed to move a toy car. 2. Recommend a ground covering that creates the right level of friction for the safe onward journey of a bike. 3. Predict the likely speed of a bike on different surfaces,

		<p>with increasing accuracy and precision, taking repeat readings when appropriate.</p> <ol style="list-style-type: none"> Record data and results of increasing complexity using scientific diagrams and labels, and tables. Use test results to make predictions to set up further comparative and fair tests. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral form. 	<p>with increasing accuracy and precision, taking repeat readings when appropriate.</p> <ol style="list-style-type: none"> Record data and results of increasing complexity using scientific diagrams and labels and tables. Use test results to make predictions to set up further comparative and fair tests. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in written forms. 	<ol style="list-style-type: none"> 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>further comparative and fair tests.</p> <ol style="list-style-type: none"> 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>based on findings from friction investigation.</p> <p>Investigation - problem solving/fair testing</p> <p>Investigate friction.</p>
<p>Y6</p>	<p>Meet the father of classification and have a look at his classic system still used today.</p> <p>Science Objectives</p> <ol style="list-style-type: none"> 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. Give reasons for classifying plants and 	<p>Can you win at ‘odd one out’? If you can, you are well on your way to becoming a classification connoisseur. Try your hand at using branching classification keys to see if you can unlock the subtle differences between certain plants and animals.</p> <p>Science Objectives</p> <ol style="list-style-type: none"> Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including 	<p>Have a go at coming up with your own feature-led sweets classification system then apply your classification knowledge and skills as you start creating more challenging zoological classification keys.</p> <p>Science Objectives</p> <ol style="list-style-type: none"> 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. 	<p>Gain your next qualification credit as you begin to put your classification skills to work: collect, record, classify and name some of the botanical beauties found on your doorstep.</p> <p>Science Objectives</p> <ol style="list-style-type: none"> Give reasons for classifying plants and animals based on specific characteristics. <p>Working Scientifically</p> <ol style="list-style-type: none"> Record results of increasing complexity using scientific diagrams and labels and classification keys. 	<p>The world is awash with unusual creatures, plants and organisms that need to be classified. Your studying is entering its advanced stages now and you need to show application of your skills.</p> <p>Science Objectives</p> <ol style="list-style-type: none"> 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. 	<p>This is your opportunity to apply your skills and develop your drawing skills further to complement your classification skills. Can you push your qualification to distinction level as you design your own ‘new’ creatures to fit into the Animalia classification system?</p> <p>Science Objectives</p> <ol style="list-style-type: none"> Describe how living things are classified into broad groups according to common observable

	<p>animals based on specific characteristics.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions. 2. Record results of increasing complexity using scientific diagrams and labels, and classification keys. 3. Report and present findings from enquiries, including conclusions, in oral and written forms such as displays and other presentations. 4. Identify scientific evidence that has been used to support or refute ideas or arguments. 	<p>microorganisms, plants and animals.</p> <p>ii) Give reasons for classifying plants and animals based on specific characteristics.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Record data and results of increasing complexity using classification keys. 2. 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. 3. Identify scientific evidence that has been used to support or refute ideas or arguments. 	<p>ii) Give reasons for classifying plants and animals based on specific characteristics.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Record data and results of increasing complexity using classification keys. 3. 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>2. Report and present findings from enquiries in oral and written forms such as displays and other presentations.</p>	<p>ii) Give reasons for classifying plants and animals based on specific characteristics.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. 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. 2. Identify scientific evidence that has been used to support or refute ideas or arguments. 	<p>characteristics and based on similarities and differences, including microorganisms, plants and animals.</p> <p>ii) Give reasons for classifying plants and animals based on specific characteristics.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Record data and results of increasing complexity using scientific diagrams and labels, and classification keys. 2. 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. 3. Identify scientific evidence that has been used to support or refute ideas or arguments.
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	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
EYFS	<p>To find out what happens to chalk and water when mixed.</p> <p>Understanding the World objective. 1.Talk about the differences between materials and changes they notice. 3-4</p>	<p>To compare the growing meadow to the muddy battle field</p> <p>Understanding the World objective. 1.Talk about what they see, using a wide vocabulary 3-4</p>	<p>To investigate materials and sort into magnetic and not magnetic</p> <p>Understanding the World objective. 1.Explore and talk about different forces they can feel 2.Explore collections of materials with similar and/or different properties. 3-4</p>	<p>To know what crops and animals need to grow</p> <p>Understanding the World objective. 1. Understand the key features of the life cycle of a plant and an animal 3-4</p>	<p>To talk about how light sources were used to celebrate different festivals To name different light sources.</p> <p>Understanding the World objective. 1.Explore how things work 3-4</p>	<p>To describe how to make gingerbread people. To talk about how the ingredients change when mixed and baked</p> <p>Understanding the World objective. 1.Talk about the differences between materials and changes they notice. 3-4</p>
Year 1	<p>Objectives</p> <p>Play 'I-Spy the Material' game in the classroom, before discussing why different materials have been used. Sort</p>	<p>Objectives</p> <p>Think carefully about the different materials and their properties, and play games in pairs with items from the classroom. Write songs based on the</p>	<p>Objectives</p> <p>Play with magnets and explore their properties. Discover what's attracted to them and why. Create games using the magnets</p>	<p>Objectives</p> <p>Play 'Odd One Out' by carefully considering the properties of some objects. Sort objects in the classroom and then have fun imagining a</p>	<p>Objectives</p> <p>Listen to the story of the three little pigs and, in small groups, recreate using straw, twigs and bricks. Make predictions and a video.</p>	<p>Objectives</p> <p>Using alternative building materials, recreate the story of the three little pigs and</p>

	<p>items according to their properties and consider what it would be like if the tables were made of jelly or the chairs were chocolate!</p> <p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass, metal.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 	<p>properties in materials and sing together at the end of the session!</p> <p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>and metal objects in the classroom.</p> <p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>world where nothing was rigid!</p> <p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. <p>Extended Writing Opportunities</p> <p>Instructions: Imagine you are one of the three little pigs. Write instructions to one of the other pigs explaining how to make a successful alternative house.</p>	<p>predict what will happen to their houses!</p> <p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions.
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	<p>4. Identify and classify.</p> <p>5. Use observations and ideas to suggest answers to questions.</p> <p>6. Gather and record data to help answer questions.</p>					<p>6. Gather and record data to help answer questions.</p> <p>Extended Writing Opportunities Stories with familiar settings: Rewrite the ending of the three little pigs with the new, improved house that you have designed. How does this change the ending?</p>
<p>Year 2</p>	<p>Objectives</p> <p>Look at a live spider, a dead spider and a toy spider. What are some of the differences between the live spider and the dead one? And the dead spider and the toy one? How can we work out what's alive and not alive? Is it sometimes difficult to tell? Armed with all these questions, go outside and collect something alive, something dead and something that was never alive. Sort these specimens into three categories.</p> <p>Science Objectives i) Explore/compare the differences between things that are living, dead, and things that have never been alive.</p>	<p>Objectives</p> <p>Explore the school grounds on the hunt for microhabitats. Zoom in on the tiny world of these habitats and draw or photograph what is going on there. Consider and draw conclusions about what lives in these microhabitats and why.</p> <p>Science Objectives i) Explore/compare the differences between things that are living, dead, and things that have never been alive. ii) 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>	<p>Objectives</p> <p>Research creatures in larger habitats and ask: why do these living things live there? Create dioramas of different habitats and label with research information.</p> <p>Science Objectives i) 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> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Use their observations and ideas to suggest answers to questions. 	<p>Objectives</p> <p>Role play food chains in the hall. Understand that, in a healthy habitat, all living things depend on each other in different ways.</p> <p>Science Objectives i) 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> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Identify and classify. 3. Use observations and ideas to suggest answers to questions. 	<p>Objectives</p> <p>Drawing on your knowledge of habitats, design a bug hotel! Incorporate many different microhabitats to encourage a variety of guests.</p> <p>Science Objectives i) Explore and compare the differences between things that are living, dead, and things that have never been alive. ii) 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> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be 	<p>Objectives</p> <p>Using the group designs, build a bug hotel in the school grounds. Create microhabitats layers using found materials: for example, sticks, leaves, tubes, moss.</p> <p>Science Objectives i) Explore and compare the differences between things that are living, dead, and things that have never been alive. ii) 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> <p>Working Scientifically</p>

	<p>ii) 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> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Identify and classify. 4. Use their observations and ideas to suggest answers to questions. 	<p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Identify and classify. 4. Use their observations and ideas to suggest answers to questions. 5. Gather and record data to help answer questions. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • Use drawing, painting and sculpture to develop and share their ideas, experiences and imagination. 	<p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> • Make: Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. <p>Extended Writing Opportunities Information text: Write information labels to go with your diorama based on your research information.</p>		<p>answered in different ways.</p> <ol style="list-style-type: none"> 2. Identify and classify. 3. Use observations and ideas to suggest answers to questions. 4. Gather and record data to help answer questions. <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> • Design: Design purposeful, functional, appealing products for themselves and other users based on design criteria. <p>Maths</p> <ul style="list-style-type: none"> • Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening. <p>Art</p> <ul style="list-style-type: none"> • Use drawing, painting and sculpture to develop and share their ideas, experiences and imagination. <p>You Will Need</p> <p>Provided Resources</p> <ul style="list-style-type: none"> • Bug Hotels resource <p>Additional Resources</p> <ul style="list-style-type: none"> • Internet access and devices 	<ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Use their observations and ideas to suggest answers to questions. 3. Gather and record data to help answer questions. <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> • Make: Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. • Evaluate: Evaluate their ideas and products against design criteria. <p>Maths</p> <ul style="list-style-type: none"> • Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning,
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					<ul style="list-style-type: none"> • Sheets of paper • Large sheets of cardboard 	<p>afternoon and evening.</p> <p>Extended Writing Opportunities Information text: Create posters to inform people about the microhabitats you have created. Laminate your posters and display alongside the bug hotel.</p>
Year 3	<p>Objectives</p> <p>Investigate what we need in order to see objects in a dark place and discover how light travels. Design a stage for a shadow puppet theatre and discover first hand how the light we see is really made of a spectrum of colours.</p> <p>Science Objectives i) Recognise that they need light in order to see things and that dark is the absence of light.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask relevant questions and use different types of scientific enquiries to answer them. 	<p>Objectives</p> <p>What's it like to see in a very dark place? Go into a dark "cave" and observe which colours show up best and which do not. Shine a torch to reveal reflectors and high visibility items and discover why they gleam! Paint and decorate your shadow puppet theatre.</p> <p>Science Objectives i) Notice that light is reflected from surfaces. ii) Recognise that light from the sun can be dangerous.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Gather, record, classify and present data in a variety of ways to help answer questions. 2. Record findings using simple 	<p>Objectives</p> <p>Investigate the strange world of mirrors. Discover what happens to writing in a mirror and how this can be used to write in secret code. Navigate a mirror maze and use mirrors to make objects multiply. Learn the secrets of mirrors and how they can help you see round corners.</p> <p>Science Objectives i) Notice that light is reflected from surfaces. ii) Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Identify differences, similarities or changes related to simple scientific ideas and processes. 2. Use straightforward scientific evidence to 	<p>Objectives</p> <p>Discover how shadows are made and investigate first hand how changing the orientation of an object or the material it is made from can affect the nature and shape of the shadow. Create shadow puppets in preparation for a shadow puppet performance.</p> <p>Science Objectives i) Recognise that shadows are formed when the light from a light source is blocked by an opaque object.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Identify differences, similarities or changes related to simple scientific ideas and processes. 2. Use straightforward scientific evidence to answer questions or to support their findings. <p>Other Curriculum Areas Design and Technology</p>	<p>Objectives</p> <p>Add a screen to your puppet theatre then use it to freely investigate how moving the light source changes the shadow. Conduct a fair test to find the precise relationship between the distance of the torch and the size of the shadow.</p> <p>Science Objectives i) Recognise that shadows are formed when the light from a light source is blocked by an opaque object. ii) Find patterns in the way that the size of shadows change.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Set up simple practical enquiries and comparative and fair tests. 2. Make systematic and careful observations and, where appropriate, take 	<p>Objectives</p> <p>Find out how coloured acetate filters can change a beam of light or a shadow. Use this together with all your knowledge and skills on Light and Shadows to create an amazing shadow puppet performance.</p> <p>Science Objectives i) Recognise that shadows are formed when the light from a light source is blocked by an opaque object.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Make systematic and careful observations. 2. Report on findings from enquiries, including oral and

	<p>2. Make systematic and careful observations.</p> <p>3. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</p> <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. 	<p>scientific language, drawings and labelled diagrams.</p> <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. 	<p>answer questions or to support findings.</p>	<ul style="list-style-type: none"> Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. <p>Extended Writing Opportunities Non-chronological report: Write a report about all that you have discovered about shadows for BBC Bitesize.</p>	<p>accurate measurements using standard units.</p> <p>3. Record findings using simple scientific language and tables.</p> <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. <p>Extended Writing Opportunities Non-chronological report: Write a report about all that you have discovered about shadows for BBC Bitesize.</p>	<p>written explanations.</p> <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. <p>Extended Writing Opportunities Instructions and explanations: Write a set of instructions for younger children explaining how to make a shadow puppet theatre and puppets.</p>
<p>Year 4</p>	<p>Good Vibrations To identify how sounds are made, associating some of them with something vibrating, by identifying and explaining sound sources around school.</p>	<p>Hearing Sounds To identify how sounds are made, associating some of them with something vibrating, by performing a dramatisation of how sounds travel. To find patterns between the volume of a sound and the strength of the vibrations that produced it, by</p>	<p>Higher and Lower To recognise that vibrations from sounds travel through a medium to the ear, by exploring how high and low sounds are created. To find patterns between the pitch of a sound and features of the object that produced it, by exploring and creating musical instruments, and</p>	<p>String Telephone To recognise that sounds get fainter as the distance from the sound source increases, by exploring how sounds change over distance. To recognise that vibrations from sounds travel through a medium to the ear, by making string telephones.</p>	<p>Soundproofing To recognise that vibrations from sounds travel through a medium to the ear, by investigating the best material for absorbing sound</p>	<p>. Making Music To recognise that vibrations from sounds travel through a medium to the ear, by making a musical instrument and explaining how it works. To find patterns between the pitch of a sound and features of the object that</p>

		performing a dramatisation of how sounds travel. To recognise that vibrations from sounds travel through a medium to the ear, by performing a dramatisation of how sounds travel.	explaining how they change pitch.			produced it, by making a musical instrument and explaining how it works.
Year 5	<p>Objectives</p> <p>You need to show Prof Cox that you have what it takes to be a great scientist. Explore his 'space facts' and come up with some great enquiry questions and processes.</p> <p>Science objectives</p> <p>i) Describe the movement of the Earth and other planets relative to the Sun in the solar system.</p> <p>ii) Describe the movement of the Moon relative to the Earth.</p> <p>iii) Describe the Sun, Earth and Moon as approximately spherical bodies.</p> <p>iv) Use the idea of the Earth's rotation to explain day and night and the apparent</p>	<p>Objectives</p> <p>Do you have what it takes to create a scale model of the solar system? Prof Cox has sent you through some fruit to substitute for your planets!</p> <p>Science Objectives</p> <p>i) Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</p> <p>ii) Describe the Sun, Earth and Moon as approximately spherical bodies.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Record data of increasing complexity using tables, scatter graphs, bar and line graphs. Identify scientific evidence that has been used to support 	<p>Objectives</p> <p>Can you build your own orrery to demonstrate how the solar system works? It's time to decide what will make the final cut in your first Stargazing episode.</p> <p>Science Objectives</p> <p>i) Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</p> <p>ii) Describe the Sun, Earth and Moon as approximately spherical bodies.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms. Identify scientific evidence that has been used to support or refute ideas or arguments. 	<p>Objectives</p> <p>Can you demonstrate that the Earth spins on its own axis? Prof Cox is keen that you set up an investigation for this one, tracking the sun through shadows.</p> <p>Science Objectives</p> <p>i) Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p> <p>Working Scientifically</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <ol style="list-style-type: none"> 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>Objectives</p> <p>Can you be a designer and a detective all in one session? You need to make a working sundial and interview people in different time zones around the world.</p> <p>Science Objectives</p> <p>i) use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms. 	<p>Objectives</p> <p>Can you implement some investigations to show why the moon appears to change shape throughout the month - you could also do some stargazing of your own!</p> <p>Science Objectives</p> <p>i) Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</p> <p>ii) Describe the Sun, Earth and Moon as approximately spherical bodies.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and

	<p>movement of the sun across the sky.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Identify scientific evidence that has been used to support or refute ideas or arguments. 	<p>or refute ideas or arguments.</p> <p>Other Curriculum Areas Maths</p> <ul style="list-style-type: none"> Use all four operations to solve problems involving measure including scaling. Solve problems involving \times and \div, including scaling by simple fractions and problems involving simple ratios. <p>Art & Design</p> <ul style="list-style-type: none"> Develop & improve art & design techniques with creativity & experimentation. <p>Extended Writing Opportunity Information text: Write a leaflet or poster giving facts and figures about your favourite planet/s.</p>		<p>using tables and bar graphs.</p> <ol style="list-style-type: none"> Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms. Identify scientific evidence that has been used to support or refute ideas or arguments. 	<ol style="list-style-type: none"> Identify scientific evidence that has been used to support or refute ideas or arguments. 	<p>controlling variables where necessary.</p> <ol style="list-style-type: none"> Record data and results of increasing complexity using scientific diagrams and labels 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. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Extended Writing Opportunities Journalistic writing: Write your own stargazing column for a local paper based on daily observations.</p>
<p>Year 6</p>	<p>Objectives</p> <p>Take part in a Crime Lab light expert selection challenge. Do you have what it takes to join the investigation? Take a</p>	<p>Objectives</p> <p>The thief was spotted on CCTV ‘casing’ the school, using a torch. Can you demonstrate that light travels in straight lines and calculate</p>	<p>Objectives</p> <p>We know that the thief could see round corners, and likely used a periscope. All suspects have one, but are they using materials that reflect well enough to see?</p>	<p>Objectives</p> <p>Many witnesses saw the thief in shadow form, but none of the sightings add up to the same person - each shadow was a different size! Explore how shadows can be deceptive</p>	<p>Objectives</p> <p>How did our criminal read the encrypted laptop password that is too high up on the wall to see with the naked eye? And how did they decode it? Have a go at splitting white</p>	<p>Objectives</p> <p>Our thief was spotted wearing not only a blue outfit, but also a red one and a yellow one. How is this possible and does it</p>

	<p>look at the initial crime report and cast your eye over the key suspects.</p> <p>Science Objectives</p> <p>i) Recognise that light appears to travel in straight lines.</p> <p>ii) 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.</p> <p>iii) 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.</p> <p>iv) Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p> <p>Working Scientifically</p> <p>1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p>	<p>plausible heights of the suspect based on their torch beam?</p> <p>Science Objectives</p> <p>i) Recognise that light appears to travel in straight lines.</p> <p>ii) 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.</p> <p>iii) 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.</p> <p>Working Scientifically</p> <p>1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>2. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>3. Report and present findings from enquiries, including conclusions, causal relationships and</p>	<p>Can you investigate and eliminate another suspect?</p> <p>Science Objectives</p> <p>i) Recognise that light appears to travel in straight lines.</p> <p>ii) 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.</p> <p>iii) 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.</p> <p>Working Scientifically</p> <p>1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>2. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>3. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>4. Use test results to make predictions to set up</p>	<p>and recreate each sighting to help identify the possible height of our thief.</p> <p>Science Objectives</p> <p>i) Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p> <p>Working Scientifically</p> <p>1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>2. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>3. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>4. 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>light into rainbow colours to help you crash through the password code.</p> <p>Science Objectives</p> <p>i) 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.</p> <p>ii) 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.</p> <p>Working Scientifically</p> <p>1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>2. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>3. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>4. 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</p>	<p>have something to do with the coloured transparencies found in the bin? Can you gather all of your evidence together to identify our key suspect?</p> <p>Science Objectives</p> <p>i) 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.</p> <p>ii) 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.</p> <p>Working Scientifically</p> <p>1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>2. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking</p>
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	<p>2. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>3. Record data and results of increasing complexity using scientific diagrams and labels, tables, bar and line graphs.</p> <p>4. 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>explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</p> <p>Other Curriculum Areas Maths</p> <ul style="list-style-type: none"> Recognise angles where they meet at a point or are on a straight line. Convert between standard units of measure. 	<p>further comparative and fair tests.</p> <p>5. 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>displays and other presentations.</p>	<p>repeat readings when appropriate.</p> <p>3. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>4. 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>Extended Writing Opportunity Explanations: Report and present findings from your light enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in written report. Journalistic writing: Write up the crime enquiry and final court proceedings, as if for a local newsletter.. Vocabulary Light, light source, reflect, reflective,</p>
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absorb, direct/
direction, transparent,
opaque, translucent,
straight

Spring 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
EYFS	<p>To talk about what to wear during different seasons and why.</p> <p>To recall some key facts about the polar regions.</p> <p>Understanding the World objective.</p> <p>1. Understand the effect of changing seasons on the natural world around them</p> <p>2. Recognise that some environments that are different to the</p>	<p>To compare and contrast each other's facial features.</p> <p>To talk about how a baby grows.</p> <p>Understanding the World objective.</p> <p>1. Talk about members of their immediate family and community.</p> <p>2. Continue developing positive attitudes about the differences between people 3-4</p>	<p>To find out how our bones work.</p> <p>To name key body parts.</p> <p>Understanding the World objective.</p> <p>1. To explore how things work</p>	<p>To understand how rainbows are made.</p> <p>Understanding the World objective.</p> <p>1. Understand some important processes and changes in the natural world around them including states of matter</p> <p>2. To explore how things work</p>	<p>To understand how people are different</p> <p>Understanding the World objective.</p> <p>1. Talk about members of their immediate family and community.</p>	<p>To find out which resources make the best junk model traffic sign</p> <p>To solve problems and refine ideas</p> <p>Understanding the World objective.</p> <p>1. Talk about the differences between materials and changes they notice.</p>

	one in which they live					
Year 1	<p>Objectives</p> <p>Go on an exploration around the school grounds, looking at animals' behaviours and habitats. Talk about the behaviour patterns you can see and consider: do similar animals live in similar places?</p> <p>Science Objectives i) Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Identify and classify. 4. Use their observations and ideas to suggest answers to questions. 	<p>Objectives</p> <p>Observe woodlice outside in their own habitat. Look at their features and then consider and predict what type of place a woodlouse would like to live. Then, try it out and record where they go!</p> <p>Science Objectives i) Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Observe closely, using simple equipment. 2. Use their observations and ideas to suggest answers to questions. 3. Gather and record data to help answer questions. 	<p>Objectives</p> <p>Oh no! There has been a puppy in the classroom and it has had an accident! Plan an investigation to test the absorbency of different types of paper. Predict which paper will be the best at soaking up the accident and then test them to find out.</p> <p>Science Objectives i) Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. ii) Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals).</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Use observations and ideas to suggest answers to questions. 	<p>Objectives</p> <p>Learn about the differences between birds, fish, amphibians, reptiles, mammals and invertebrates. Sort the animals into groups according to their features. Consider why some animals are kept as pets and others aren't. Then design your own imaginary pet!</p> <p>Science Objectives i) Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. ii) Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Perform simple tests. 3. Use their observations and ideas to suggest answers to questions. <p>Other Curriculum Areas Design and Technology</p>	<p>Objectives</p> <p>Discuss what pets like and what you need to do to keep them happy and healthy. Think about what sort of care the home-made pets might need. Decide how you can keep your pets happy and healthy.</p> <p>Science Objectives i) Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. ii) Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Identify and classify. <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> • Make: Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. <p>Extended Writing Opportunities Labels, lists and signs: Make a</p>	<p>Objectives</p> <p>Invite your pets (and their owners) into school! Record your observations in video and photographs as you ask the owners questions about keeping them happy and healthy. Discover what makes these animals good pets? And discover what they all have in common?</p> <p>Science Objectives i) Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. ii) Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways.

	<p>5. Gather and record data to help answer questions.</p>		<p>4. Gather and record data to help answer questions.</p>	<ul style="list-style-type: none"> Design: Design purposeful, functional, appealing products for themselves and other users based on design criteria. 	<p>list of all of the things you need and the things you have to do, in order to look after a particular pet. Information text: Explain to a new owner how they should look after their new pet.</p>	<ol style="list-style-type: none"> Observe closely, using simple equipment. Use their observations and ideas to suggest answers to questions. Gather and record data to help answer questions.
<p>Year 2</p>	<p>Objectives</p> <p>Explore the properties of different kitchen papers and disposable cloths. Rise to the challenge of mopping water from the floor. Which paper is the most absorbent? Which will be the best for mopping up the spillage?</p> <p>Science Objectives</p> <ol style="list-style-type: none"> Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out how the shapes of solid objects made from some materials can be changed by squashing, 	<p>Objectives</p> <p>Think about hard materials and their absorbent properties. Which building materials are absorbent? Why must they have this property? Test different hard materials and record the results.</p> <p>Science Objectives</p> <ol style="list-style-type: none"> Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. <p>Working Scientifically</p> <ol style="list-style-type: none"> Ask simple questions and recognise that 	<p>Objectives</p> <p>Explore different fabrics and investigate how waterproof they are using a dropper of water. How can we make the fabrics waterproof? Colour them in with wax crayon and repeat the investigation!</p> <p>Science Objectives</p> <ol style="list-style-type: none"> Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. <p>Working Scientifically</p> <ol style="list-style-type: none"> Ask simple questions and recognise that they 	<p>Objectives</p> <p>Explore the textures and properties of different materials by printing with a selection of items. Make a large collective piece of art showing the variety of materials used by the class.</p> <p>Science Objectives</p> <ol style="list-style-type: none"> Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. <p>Working Scientifically</p> <ol style="list-style-type: none"> Ask simple questions and recognise that they can be answered in different ways. 	<p>Objectives</p> <p>Learn more about the waterproof properties of wax by having a go at a wax resist picture!</p> <p>Science Objectives</p> <ol style="list-style-type: none"> Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. <p>Working Scientifically</p> <ol style="list-style-type: none"> Ask simple questions and recognise that they can be answered in different ways. Observe closely, using simple equipment. Perform simple tests. Identify and classify. 	<p>Objectives</p> <p>Talk about how some materials change shape when they are heated up. Chop up old wax crayons, heat them up and turn them into different shapes!</p> <p>Science Objectives</p> <ol style="list-style-type: none"> Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Think about unusual and creative uses for everyday materials. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

	<p>bending, twisting and stretching.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use observations and ideas to suggest answers to questions. 6. Gather and record data to help in answering questions. <p>Extended Writing Opportunities Recount: Write a science report recounting how you investigated the absorbency of various materials and what you found out.</p>	<p>they can be answered in different ways.</p> <ol style="list-style-type: none"> 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use observations and ideas to suggest answers to questions. 6. Gather and record data to help in answering questions. 	<p>can be answered in different ways.</p> <ol style="list-style-type: none"> 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use observations and ideas to suggest answers to questions. 6. Gather and record data to help in answering questions. 	<ol style="list-style-type: none"> 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use observations and ideas to suggest answers to questions. 6. Gather and record data to help in answering questions. 	<ol style="list-style-type: none"> 5. Use observations and ideas to suggest answers to questions. 6. Gather and record data to help in answering questions. <p>Extended Writing Opportunities Information text: Use your new wax crayons to make colourful posters about why we should be recycling materials and not throwing them away.</p>	<p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use observations and ideas to suggest answers to questions. 6. Gather and record data to help in answering questions.
Key vocab						
Year 3	<p>Objectives</p> <p>You receive the letter from Mr Newton of</p>	<p>Objectives</p> <p>Recap by thinking about the different forces</p>	<p>Objectives</p> <p>Begin to think about which items are attracted to</p>	<p>Objectives</p> <p>Explore how magnets behave towards each other in a variety</p>	<p>Objectives</p> <p>Play a fast paced game to practise your knowledge of</p>	<p>Objectives</p> <p>It's time to test your knowledge of magnetic</p>

<p>the British Scientific Society and agree to help him develop some exciting activities on the theme of Magnetism for their annual science fair. But first you need to get to grips with what a force is!</p> <p>Science Objectives i) Compare how things move on different surfaces.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Set up simple practical enquiries and comparative and fair tests. 2. Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment. <p>Other Curriculum Areas Maths - Measurement</p> <ul style="list-style-type: none"> • Measure, compare, add and subtract: lengths (m/cm/mm). <p>Extended Writing Opportunities Recount: Write a letter to Mr Andrew Newton</p>	<p>involved in various sports. Discover that gravity is a force that doesn't need contact – but is it the only one? No: magnetism can also pull objects from a distance. Experiment with magnetism, ask questions and design fair tests to answer them.</p> <p>Science Objectives i) Notice that some forces need contact between two objects, but magnetic forces can act at a distance.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask relevant questions and use different types of scientific enquiries to answer them. 2. Set up simple practical enquiries and comparative and fair tests. 3. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. <p>Other Curriculum Areas Maths - Statistics</p> <ul style="list-style-type: none"> • Interpret and present data using bar charts, 	<p>magnets and why. Ask questions and test them out e.g. Is it just metal things? Are all metal things attracted? Why not?</p> <p>Science Objectives i) Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet and identify some magnetic materials.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask relevant questions and use different types of scientific enquiries to answer them. 2. Gather, record, classify and present data in a variety of ways to help answer questions. 3. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. 4. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. <p>Extended Writing Opportunities Non-chronological reports: Write an information leaflet for younger children about the Magic of Magnets.</p>	<p>of different exciting challenges. Discover that magnets have 2 poles and that same poles repel whilst opposite poles attract. Learn that the world itself is a giant magnet!</p> <p>Science Objectives i) Observe how magnets attract or repel each other and attract some materials and not others. ii) Describe magnets as having two poles.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. 2. Use straightforward scientific evidence to answer questions or to support findings. 	<p>whether magnets attract or repel each other depending on which poles are facing. Devise an exciting activity on magnetism to fascinate visitors to the science fair.</p> <p>Science Objectives i) Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Use straightforward scientific evidence to answer questions or to support findings. <p>Other Curriculum Areas Maths - Measurement</p> <ul style="list-style-type: none"> • Estimate and read time with increasing accuracy to the nearest minute. Record and compare time in terms of seconds and minutes. 	<p>forces in a quiz before setting up your exhibit ready for the science fair. You will need to write some questions to really get visitors thinking and then write your own explanations and answers. Test run each other's exhibits and discuss possible improvements before all the photos and ideas get sent off to Mr Newton.</p> <p>Science Objectives i) Notice that some forces need contact between two objects, but magnetic forces can act at a distance. ii) Observe how magnets attract or repel each other and attract some materials and not others. iii) Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet and identify some magnetic materials.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Report on findings from enquiries, including oral and written explanations,
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	of the British Scientific Society to tell him about your initial investigation into the forces needed to move a toy vehicle on different surfaces.	pictograms and tables.				displays or presentations of results and conclusions. 2. Identify differences, similarities or changes related to simple scientific ideas and processes. Extended Writing Opportunities Explanations: Write questions and explanations about magnetic forces for the visitors to your science fair.
Key Vocab						
Year 4	To describe the simple functions of the basic parts of the digestive system in humans in the context of identifying the parts of the digestive system Digestive system parts	To describe the simple functions of the basic parts of the digestive system in humans by explaining the functions of the different parts of the digestive system. Digestive system functions	To identify the different types of teeth in humans and their simple functions by learning about different types of teeth. Types and functions of teeth	To ask relevant questions and use different types of scientific enquiries to answer them by distinguishing between scientific and non-scientific questions and choosing between types of scientific enquiry. Tooth decay enquiry part 1	To make systematic and careful observations by observing the changes that occur in their enquiry or test. To use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions by presenting findings, making predictions and raising questions about results. Tooth decay enquiry part 2	To construct and interpret a variety of food chains, identifying producers, predators and prey by understanding food chains and the role of different plants and animals within them. Digestive system parts
Key vocab						
Year 5	Science Objectives i) Recognise that gear mechanisms allow a	Science Objectives i) Identify the effects of friction that acts between moving surfaces.	Levers , balacing	Famous scientist study	Famous scientist study	Famous scientist study

	<p>smaller force to have a greater effect.</p> <p>ii) Identify the effects of friction, that acts between moving surfaces.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Record data and results of increasing complexity using scientific diagrams and labels, tables, scatter graphs, bar and line graphs. 3. Use test results to make predictions to set up further comparative and fair tests. 4. 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 	<p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. 3. Record data and results of increasing complexity using scientific diagrams and labels, tables, scatter graphs, bar and line graphs. 4. Use test results to make predictions to set up further comparative and fair tests. 5. 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>Pick a famous scientist in a field of your choice.</p> <p>Pupils to research and create either a presentation, poster or non-chronological report about their chosen scientist.</p>	<p>Pick a famous scientist in a field of your choice.</p> <p>Pupils to research and create either a presentation, poster or non-chronological report about their chosen scientist.</p>	<p>Pick a famous scientist in a field of your choice.</p> <p>Pupils to research and create either a presentation, poster or non-chronological report about their chosen scientist.</p>
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	<p>as displays and other presentations.</p> <p>Other Curriculum Areas Maths</p> <ul style="list-style-type: none"> Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. <p>Extended Writing Opportunity Journalistic reports: Write an article, for a cycling magazine, based on your investigation of bike gears and tell them the best gear combinations for specific terrains.</p>					
Key vocab						
Year 6	<p>Objectives</p> <p>Take part in a Dragons' Den briefing session and learn about the challenges that lie ahead as designers of festive lights and decorations with an electric buzz.</p> <p>Science Objectives i) Compare and give reasons for variations in how components function, including the</p>	<p>Objectives</p> <p>Using your planning meeting outcomes from Session 1 to set up some exploratory circuits to identify how they work and how to achieve a range of effects.</p> <p>Science Objectives i) Associate the brightness of a lamp or the volume of a buzzer with the number and</p>	<p>Objectives</p> <p>Your team needs to show that it has a technical flair for designing electrical circuits. Can you draw accurate circuit diagrams as a 'blueprint' for your design?</p> <p>Science Objectives i) Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of</p>	<p>Objectives</p> <p>The dragons have added in a last minute design tweak - can you develop and include a dimmer switch into your design?</p> <p>Science Objectives i) Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers</p>	<p>Objectives</p> <p>Start putting your ideas and research into action as you create your festive lights and decorations.</p> <p>Science Objectives i) Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. ii) Compare and give reasons for variations in how components function,</p>	<p>Objectives</p> <p>It's time for some final tweaks before entering the Dragons' Den. You will need to impress the dragons with your scientific know-how and the rigorous testing processes you have adopted. Good luck!</p> <p>Science Objectives i) Associate the brightness of a lamp or</p>

	<p>brightness of bulbs, the loudness of buzzers and the on/off position of switches.</p> <p>ii) Use recognised symbols when representing a simple circuit in a diagram.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 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>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> Use research and develop design criteria to inform the design of innovative, 	<p>voltage of cells used in the circuit.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 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 tables, scatter graphs, bar and line graphs. Use test results to make predictions to set up further comparative and fair tests. <p>Extended Writing Opportunity Explanation: Carry out a series of enquiries that explore the effects of voltage on electrical circuit components and write up your findings, causal relationships and explanations in a written report.</p>	<p>buzzers and the on/off position of switches.</p> <p>ii) Use recognised symbols when representing a simple circuit in a diagram.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Record data and results of increasing complexity using scientific diagrams and labels. Identify scientific evidence that has been used to support or refute ideas or arguments. 	<p>and the on/off position of switches.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 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 tables, scatter graphs, bar and line graphs. <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> Select from and use a wider range of tools and equipment to perform practical tasks accurately. Select from and use a wider range of materials and components, according to their functional properties and aesthetic qualities. Understand and use electrical systems in their products. 	<p>including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.</p> <p>iii) Use recognised symbols when representing a simple circuit in a diagram.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 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. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> Generate, develop, model and communicate their ideas through to creation of a prototype. Select from and use a wider range of tools and equipment to perform practical tasks accurately. Select from and use a wider range of materials and components, according to their functional properties and aesthetic qualities. Evaluate ideas and products against design criteria and consider the views of others to improve their work. Understand 	<p>the volume of a buzzer with the number and voltage of cells used in the circuit.</p> <p>ii) 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.</p> <p>iii) Use recognised symbols when representing a simple circuit in a diagram.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 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. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Design and Technology</p>
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	functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Understand and use electrical systems in their products.				and use electrical systems in their products.	<ul style="list-style-type: none"> Evaluate ideas and products against design criteria and consider the views of others to improve their work; understand and use electrical systems in their products. <p>Extended Writing Opportunity Persuasive writing: Write up the research and development of your festive lights decoration in order to persuade the Dragons that yours is the best.</p>
Key vocab						

Spring 2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
EYFS	<p>To find and identify the signs of Spring</p> <p>To name animals that are hatched from eggs</p> <p>Understanding the World objective. 1. Understanding the effect of</p>	<p>To talk about the features of dinosaurs that are herbivore and compare to those of carnivores</p> <p>Understanding the World objective. 1. Explore the natural world around them, making</p>	<p>To describe how different materials, feel and look like</p> <p>Understanding the World objective. 1. Describe what they see, hear and feel.</p>	<p>To find out about the habitats in which dinosaurs lived</p> <p>Understanding the World objective. 1. Recognise some environments that are different to the one in which they live.</p>	<p>To learn some facts about bones and fossils</p> <p>Understanding the World objective. 1. Understand the key features of the life cycle of a plant and an animal</p>	<p>To use adjectives to describe different natural features</p> <p>Understanding the World objective. 1. Recognise some environments that are different to the</p>

	<p>changing seasons on the natural world around them</p> <p>2.Explore the natural world around them, making observations and drawing pictures of animals and plants.</p>	<p>observations and drawing pictures of animals and plants</p>				<p>one in which they live.</p>
<p>Year 1</p>	<p>Objectives</p> <p>Look at a selection of materials and consider which one is best for fixing a torn umbrella. Explain your selection and predict the outcome.</p> <p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass and metal.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of</p>	<p>Objectives</p> <p>Test a selection of materials using a pipette to simulate raindrops and consider why some materials let water through and others do not.</p> <p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass and metal.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of everyday materials on the</p>	<p>Objectives</p> <p>Watch a block of ice melt and record the changes. Understand what happens to the particles in ice when it melts and act this out in the playground.</p> <p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass and metal.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of everyday materials on the</p>	<p>Objectives</p> <p>Working with play figures frozen in ice, devise an investigation to release them. How can you melt the ice quickly to free the figure? Can you do it slowly so it takes a lot longer?</p> <p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass and metal.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p>	<p>Objectives</p> <p>Explore puddles outside and make your own! Observe what happens to a puddle over time and record the results.</p> <p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass and metal.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Working Scientifically</p>	<p>Objectives</p> <p>Continue to explore puddles and observe how they change. Think carefully about what is happening: can you explain why a puddle changes?</p> <p>Science Objectives</p> <p>i) Distinguish between an object and the material from which it is made.</p> <p>ii) Identify and name a variety of everyday materials, including wood, plastic, glass and metal.</p> <p>iii) Describe the simple physical properties of a variety of everyday materials.</p> <p>iv) Compare and group together a variety of</p>

	<p>everyday materials on the basis of their simple physical properties.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>basis of their simple physical properties.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>basis of their simple physical properties.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>everyday materials on the basis of their simple physical properties.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. <p>Extended Writing Opportunities Recount: Write an account of puddle day. Letter: Write a letter to an alien visitor to Earth explaining why puddles appear, change and disappear.</p>
<p>Year 2</p>	<p>Objectives</p> <p>Explore all sorts of bouncy balls and investigate which one is the bounciest. Does</p>	<p>Objectives</p> <p>Consider different fabrics and what they could be used for. Devise an investigation to test the</p>	<p>Objectives</p> <p>Examine a selection of different materials and explore their rigidity by devising an investigation to</p>	<p>Objectives</p> <p>Consider and sort different materials according to their material properties. Wonder what the world would be like</p>	<p>Objectives</p> <p>Explore a selection of paper and predict the strongest one.</p>	<p>Objectives</p> <p>Using your knowledge of paper strength and rigidity, build a paper</p>

	<p>this mean the ball that bounces the highest or the one that bounces for the longest time? Plot the results on a chart.</p> <p>Science Objectives i) Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>ii) Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. <p>Extended Writing Opportunities Letter: The Olympics committee want to know which is the best stretchy fabric for the swimsuits of the Olympic</p>	<p>elasticity of the fabric and record the results.</p> <p>Science Objectives i) Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>ii) Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. <p>Extended Writing Opportunities Letter: The Olympics committee want to know which is the best stretchy fabric for the swimsuits of the Olympic</p>	<p>test them. Why is it important that some materials bend and flex?</p> <p>Science Objectives i) Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>ii) Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>without rigidity and test materials for their durability and toughness.</p> <p>Science Objectives i) Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>ii) Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>Test the papers using weights and record the results.</p> <p>Science Objectives i) Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>ii) Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>bridge strong enough to hold a toy car.</p> <p>Science Objectives i) Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>ii) Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions.
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	<p>answers to questions.</p> <p>6. Gather and record data to help answer questions.</p>	<p>swimming team. Write a letter summarising your investigation and findings.</p>				<p>Extended Writing Opportunities Information texts: A toy firm wants to know what the best design for a paper bridge is. Write up how you carried out your investigation and what you recommend.</p>
Key vocab						
Year 3	<p>Objectives</p> <p>Get introduced to clients in need of advice on diet, health and exercise and take on the task of becoming a personal trainer. Tabulate, draw graphs and analyse data from a survey of their client's diet and use it to answer questions.</p> <p>Science Objectives i) 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.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Gather, record, classify and present data in a variety of ways to 	<p>Objectives</p> <p>Continue on the quest as personal trainers by becoming experts on nutrition. Use knowledge of food groups and a balanced diet to design healthy meals by creating lifelike models of food on paper plates.</p> <p>Science Objectives i) 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.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Gather, record, classify and present data in a variety of ways to help in answering questions. Use results to draw simple conclusions, make predictions for 	<p>Objectives</p> <p>This session you will become an expert on bones, joints and skeletons, acquiring scientific vocabulary and understanding whilst playing games and building your very own dancing skeleton string puppet.</p> <p>Science Objectives i) Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users (a puppet with strings). 	<p>Objectives</p> <p>Learn how muscles work in pairs and investigate the question 'Do people have stronger muscles because they use them more?' Make predictions, gather data, discuss, display and interpret findings.</p> <p>Science Objectives i) Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Gather, record, classify and present data in a variety of ways to help in answering questions. Use straightforward scientific evidence to answer questions or to support findings - pattern seeking enquiry. <p>Other Curriculum Areas Maths - Statistics</p>	<p>Objectives</p> <p>Learn how the diaphragm is used in breathing and build an instrument to measure lung capacity. Plan and carry out an investigation to answer a health and fitness question.</p> <p>Science Objectives i) Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Set up simple practical enquiries and comparative and fair tests. Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. 	<p>Objectives</p> <p>Test and review all your knowledge on Health and Fitness gained so far. Then it's time to make final preparations before meeting your clients to answer all their Health and Fitness questions in an impressive presentation illustrated with the fabulous research and resources you've produced.</p> <p>Science Objectives i) 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. ii) Identify that humans and some other animals have skeletons and muscles</p>

	<p>help answer questions.</p> <p>2. Record findings using simple scientific language, bar charts, and tables.</p> <p>Other Curriculum Areas Maths - Statistics</p> <ul style="list-style-type: none"> Interpret and present data using bar charts, pictograms and tables. Solve one-step and two-step questions. 	<p>new values, suggest improvements and raise further questions.</p> <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Select from and use a wider, more complex range of materials, taking into account their properties. 		<ul style="list-style-type: none"> Interpret and present data using bar charts, pictograms and tables. Understand and use simple scales (e.g. 2, 5, 10 units per cm) in pictograms and bar charts with increasing accuracy. Continue to interpret data presented in many contexts. <p>Extended Writing Opportunities Recount: Write up for the TV programme Newsround, as a recount, your investigation 'Do some people have stronger muscles because they use them more?'</p>	<p>Other Curriculum Areas Maths - Statistics</p> <ul style="list-style-type: none"> Interpret and present data using bar charts, pictograms and tables. Solve one-step and two-step questions. 	<p>for support, protection and movement.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Identify differences, similarities or changes related to simple scientific ideas and processes. <p>Other Curriculum Areas Maths - Statistics</p> <ul style="list-style-type: none"> Interpret and present data using bar charts, pictograms and tables. <p>Extended Writing Opportunities Persuasive writing: Write a letter to the head teacher persuading them of some changes to the school day, lunchtime or break times which you feel would help pupils improve their health and fitness.</p>
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Key Vocab						
Year 4	<p>To recognise that environments can change and that this can sometimes pose dangers to living things by exploring Gerald Durrell's conservation work in Madagascar.</p> <p>To explore deforestation and conservation in Madagascar.</p> <p>To set up simple practical enquiries and report on findings from enquiries in the context of soil erosion and nutrient loss.</p> <p>To set up an enquiry to find out about soil erosion.</p> <p>Lesson 1 Gerald Durrell</p>	<p>To recognise that vibrations from sounds travel through a medium to the ear in the context of Alexander Graham Bell's invention of the telephone.</p> <p>To describe Alexander Graham Bell and his inventions.</p> <p>To report on findings, including oral and written presentations and displays in the context of Alexander Graham Bell's invention of the telephone.</p> <p>To present my findings about Alexander Graham Bell.</p> <p>Lesson 2 Alexander Graham Bell.</p>	<p>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers in the context of building a solar oven.</p> <p>To build a solar oven and explain how the temperature changes inside it.</p> <p>Lesson 3 Maria Telkes</p>	<p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit in the context of creating a traffic light.</p> <p>To build a traffic light using series circuits.</p> <p>Lesson 4 Garrett Morgan</p>	<p>To compare and group materials together according to whether they are solids, liquids or gases by exploring the discovery of oxygen.</p> <p>To describe the properties of oxygen gas.</p> <p>To identify changes relating to simple scientific ideas and processes by exploring the discovery of oxygen and the theory of phlogiston.</p> <p>To explain how oxygen was discovered.</p> <p>Lesson 5 Discovering oxygen</p>	<p>To identify the different types of teeth in humans and their functions by finding out about the invention of toothpaste.</p> <p>To identify ways to look after our teeth.</p> <p>To use scientific evidence from comparative tests to support their findings by comparing different toothpastes.</p> <p>To investigate the invention of toothpaste.</p> <p>Lesson 6 Discovering toothpaste</p>
Key vocab						
Year 5	<p>Objectives</p> <p>Dissolve into your first Science Museum commission by investigating soluble and non-soluble materials. Develop your initial education pack contributions and link them to an exclusive Pinterest board by creating your own QR code.</p> <p>Science Objectives</p> <p>i) Compare and group together everyday materials on the basis of their properties, including their</p>	<p>Objectives</p> <p>Explore an array of methods to separate mixed materials back into their constituent parts. Write up your user friendly experiments to include in your education pack and Pinterest page.</p> <p>Science Objectives</p> <p>i) Compare and group together everyday materials on the basis of their properties, including their solubility and response to magnets.</p> <p>ii) Know that some materials will dissolve in liquid to form a solution and describe how to</p>	<p>Objectives</p> <p>Let's hope it doesn't get too hot in the kitchen as you investigate and explore the gourmet side to chemistry. Take an enquiry based approach to the science of baking bread and cakes, and explore the weird and wonderful world of eggs!</p> <p>Science Objectives</p> <p>i) Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p>	<p>Objectives</p> <p>Some changes in materials can't be reversed and they can produce new materials in the process. Immerse yourself in the world of oxidation and observe how rust is formed and how apples spoil when cut open – can you prolong your apple's shelf life or is it all looking brown?</p> <p>Science Objectives</p> <p>i) Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p>	<p>Objectives</p> <p>Learn about some chemists who have invented very useful new materials and have fun creating new materials. Find out about brand new materials that are still in the development phase of their life.</p> <p>Science Objectives</p> <p>i) Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p> <p>Working Scientifically</p>	<p>Objectives</p> <p>Get your colourful lab coats on and invite some potential 'clients' to try out your education pack - share your Pinterest page and show them your investigating eggs video. Is your Education pack ready for the Science Museum or does it still need a few 'changes'?! </p> <p>Science Objectives</p> <p>i) Compare and group together everyday materials on the basis of their properties, including their</p>

	<p>solubility and response to magnets.</p> <p>ii) Know that some materials will dissolve in liquid to form a solution.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Record data and results of increasing complexity using scientific diagrams and labels, tables and line graphs. 3. Use test results to make predictions to set up further comparative and fair tests. 4. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in written form. 	<p>recover a substance from a solution.</p> <p>iii) Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</p> <p>iv) Demonstrate that dissolving, mixing and changes of state are reversible changes.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Use test results to make predictions to set up further comparative and fair tests. 3. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in written forms. <p>Other Curriculum Areas Computing</p>	<p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Record results of increasing complexity using scientific diagrams and labels. 3. Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. 4. Use test results to make predictions to set up further comparative and fair tests. 5. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in written forms. <p>Other Curriculum Areas Computing</p> <ul style="list-style-type: none"> • Understand the opportunities that the www offers for communication and collaboration. Select, use and combine software (including Internet services) to 	<p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Record data and results of increasing complexity using scientific diagrams and labels, and tables. 3. 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>Other Curriculum Areas Computing</p> <ul style="list-style-type: none"> • Understand the opportunities that the www offers for communication and collaboration. Select, use and combine software (including internet services) to design and create content. 	<ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. 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. 3. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Computing</p> <ul style="list-style-type: none"> • Understand the opportunities that the www offers for communication and collaboration. Select, use and combine software (including internet services) on a range of digital devices to design and create content. <p>Extended Writing Opportunities Biography: Research key information about some chemists who have invented very useful new materials and write short biographies for a class hall of fame. Argument and debate: Take part in a balloon debate and argue why your particular</p>	<p>solubility and response to magnets.</p> <p>ii) Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</p> <p>iii) Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</p> <p>iv) Demonstrate that dissolving, mixing and changes of state are reversible changes.</p> <p>v) Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and
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	<p>Other Curriculum Areas Computing</p> <ul style="list-style-type: none"> Understand the opportunities that the www offers for communication and collaboration. Select, use & combine software (including Internet services) to design and create content. 	<ul style="list-style-type: none"> Understand the opportunities that the web offers for communication and collaboration. Select, use and combine software (including internet services) to design and create content. 	<p>design and create content.</p>		<p>materials chemist should survive the trip.</p>	<p>controlling variables where necessary.</p> <ol style="list-style-type: none"> Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. 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. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Computing</p> <ul style="list-style-type: none"> Understand the opportunities that the www offers for communication and collaboration. Select, use and combine software (including internet services) on a
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						<p>range of digital devices to design & create content.</p> <p>Extended Writing Opportunities Information text: Write a report of your methods and findings for the Science Museum</p>
Key vocab						
Year 6	<p>Objectives</p> <p>Play inheritance detective and identify inherited and environmental characteristics. Score survival points by identifying examples of variation through the creation of your very own dog Top Trumps cards.</p> <p>Science Objectives i) Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Report and present findings from enquiries, including conclusions, causal 	<p>Objectives</p> <p>Take a look at mutations and how adaptation can prove useful in the real game of survival! Meet the man behind the theory of natural selection and play the variation game.</p> <p>Science Objectives i) Recognise that living things have changed over time. ii) Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and 	<p>Objectives</p> <p>Play ‘survivor’ to see which creatures will survive in a range of environments and biomes. Can you score more survival points through your own living thing ‘survivor’ designs?</p> <p>Science Objectives i) Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. 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>Objectives</p> <p>Meet Darwin, Anning and Wallace - the evolutionary dream team - and find out the scientific importance of their work and have a go at proving their theories. Play fossil, ‘what if’ to top up your survivor score.</p> <p>Science Objectives i) Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. 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>Objectives</p> <p>Have you ever wondered how the humble biscuit has evolved over the past 100 years? Well, this is your chance! Create a biscuit cladogram and use your evolutionary expertise in the exploration of bird flight and animal cladograms.</p> <p>Science Objectives i) Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Identify scientific evidence that has been used to support or refute ideas or arguments. 	<p>Objectives</p> <p>How did the giraffe get a long neck and why does the camel have a hump? Read some traditional folk tales to explain these features then find out the evolutionary facts behind the myths and write your own fact-based versions. Add up your survivor score - will you make it onto the leaders’ board?</p> <p>Science Objectives i) Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. ii) Recognise that living things produce offspring of the same kind, but normally</p>

	<p>relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</p> <p>2. Identify scientific evidence that has been used to support or refute ideas or arguments.</p>	<p>degree of trust in results, in oral and written forms such as displays and other presentations.</p> <p>2. Identify scientific evidence that has been used to support or refute ideas or arguments.</p> <p>Other Curriculum Areas Geography</p> <ul style="list-style-type: none"> Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes. 	<p>2. Identify scientific evidence that has been used to support or refute ideas or arguments.</p> <p>Other Curriculum Areas Geography</p> <ul style="list-style-type: none"> Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes. 	<p>2. Identify scientific evidence that has been used to support or refute ideas or arguments.</p>		<p>offspring vary and are not identical to their parents.</p> <p>iii) Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 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. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Extended Writing Opportunity Argument and debate: Write up your new animal or plant explaining all adaptations to an extreme climate and why it would be the most valuable addition to the world. Fiction: Explain through story writing</p>
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						how certain features of animals have evolved.
Key vocab						

Summer 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
EYFS	<p>To understand the role climate change has on countries</p> <p>Understanding the World objective.</p> <p>1.Understand some important processes and changes in the natural world around them</p>	<p>To find out how and why slugs produce slime</p> <p>Understanding the World objective.</p> <p>1.Explore the natural world, making observations and drawing pictures of animals.</p>	<p>To name the materials that different landmarks are made from</p> <p>Understanding the World objective.</p> <p>1.Talk about the differences between materials and changes they notice</p>	<p>To talk about our environments and the animals we expect to see living there</p> <p>Understanding the World objective.</p> <p>1.Explore the natural world, making observations and drawing pictures of animals.</p>	<p>To name animals that are native to Africa</p> <p>To compare the habitats of woodland animals to safari animals</p> <p>Understanding the World objective.</p> <p>1.Recognise that some environments that are different to the one in which they live</p>	<p>To recall some facts about animals from around the world and their habitats</p> <p>Understanding the World objective.</p> <p>1.Recognise that some environments that are different to the one in which they live</p>

<p>Year 1</p>	<p>Objectives</p> <p>Think about what we already know about weather and look at how weather forecasters tell us what weather to expect. Make forecasts about the weather at school, using weather symbols and notes made 'on location' in the playground.</p> <p>Science Objectives</p> <p>i) Observe changes across the four seasons.</p> <p>ii) Observe and describe weather associated with the seasons and how day length varies.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. <p>Other Curriculum Areas Art and Design</p>	<p>Objectives</p> <p>Go outside and observe the weather, drawing what you see and describing what you hear and feel. Then go back inside to create a seasons collage for the classroom.</p> <p>Science Objectives</p> <p>i) Observe changes across the four seasons.</p> <p>ii) Observe and describe weather associated with the seasons and how day length varies.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>Objectives</p> <p>Go outside and have fun with shadows. Make them jump, chase each other and play shadow tag. Draw round them to see if they change during the day.</p> <p>Science Objectives</p> <p>i) Observe changes across the four seasons.</p> <p>ii) Observe and describe weather associated with the seasons and how day length varies.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>Objectives</p> <p>Look at weather in the playground, at the rain falling and what it sounds like. Design a weather station to help collect data about the weather at school. Make a rainfall gauge and record the results.</p> <p>Science Objectives</p> <p>i) Observe changes across the four seasons.</p> <p>ii) Observe and describe weather associated with the seasons and how day length varies.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>Objectives</p> <p>Look at the wind in the playground and wonder if there is a link between wind direction and rainfall. Does the wind change direction during the day? Make a wind-sock to measure the direction of the wind in the playground.</p> <p>Science Objectives</p> <p>i) Observe changes across the four seasons.</p> <p>ii) Observe and describe weather associated with the seasons and how day length varies.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>Objectives</p> <p>Measure the temperature inside the classroom and outside and wonder how different that would be in different seasons. Make a thermometer box to house a thermometer and use it outside in the playground.</p> <p>Science Objectives</p> <p>i) Observe changes across the four seasons.</p> <p>ii) Observe and describe weather associated with the seasons and how day length varies.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest
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	<p>ideas to suggest answers to questions.</p> <p>6. Gather and record data to help answer questions.</p>	<ul style="list-style-type: none"> • Use a range of materials creatively to design and make products. • Use drawing, painting and sculpture to develop and share their ideas, experiences and imagination. • Develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space. 				<p>answers to questions.</p> <p>6. Gather and record data to help answer questions.</p> <p>Extended Writing Opportunities Information text: Write a weather report describing the weather you have recorded. Labels, lists and signs: Make notices and signs to go with your class weather station.</p>
<p>Year 2</p>	<p>Objectives</p> <p>Explore the outdoors, looking at how plants disperse their seeds and why. Think specifically about plants that spread their seeds by utilising the wind. Make a seed helicopter and a dandelion seed.</p> <p>Science Objectives</p> <p>i) Observe and describe how seeds and bulbs grow into mature plants.</p> <p>ii) Find out and describe how plants need water, light and a suitable temperature to grow/stay healthy.</p>	<p>Objectives</p> <p>Consider different ways that plants can disperse their seeds, including seed designed to stick on animals and humans. Using clay or modroc, create a large burr, with hooks and use junk modelling to create other seeds.</p> <p>Science Objectives</p> <p>i) Observe and describe how seeds and bulbs grow into mature plants.</p> <p>ii) Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>Working Scientifically</p>	<p>Objectives</p> <p>Talk about what bulbs need to grow into healthy plants. Plant beans in bags of water and watch them grow. What will happen to the bean left growing in a cupboard?</p> <p>Science Objectives</p> <p>i) Observe and describe how seeds and bulbs grow into mature plants.</p> <p>ii) Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>Working Scientifically</p> <p>1. Ask simple questions and recognise that they can be answered in different ways.</p>	<p>Objectives</p> <p>Think about the conditions for healthy plant growth and plant your own cress seeds. Record their growth. How long will it take for them to be long enough to eat?</p> <p>Science Objectives</p> <p>i) Observe and describe how seeds and bulbs grow into mature plants.</p> <p>ii) Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>Working Scientifically</p> <p>1. Ask simple questions and recognise that they can be answered in different ways.</p>	<p>Objectives</p> <p>Record the growth of the bean and look at how it has developed over the last few weeks. Can you recreate the plant with craft materials? Can you label the parts of the plant?</p> <p>Science Objectives</p> <p>i) Observe and describe how seeds and bulbs grow into mature plants.</p> <p>ii) Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>Working Scientifically</p> <p>1. Ask simple questions and recognise that they can be answered in different ways.</p>	<p>Objectives</p> <p>Look really closely at the little cress plants and draw what you see. Then pop them into egg sandwiches for an egg and cress snack!</p> <p>Science Objectives</p> <p>i) Observe and describe how seeds and bulbs grow into mature plants.</p> <p>ii) Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>Working Scientifically</p> <p>1. Ask simple questions and recognise that they</p>

	<p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<ol style="list-style-type: none"> 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<ol style="list-style-type: none"> 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<ol style="list-style-type: none"> 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. <p>Extended Writing Opportunities Information text: Make an information leaflet, to go with your hydroponic plant model, explaining the functions of the parts of the plant and their importance</p>	<p>can be answered in different ways.</p> <ol style="list-style-type: none"> 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. <p>Extended Writing Opportunities Instructions: Write instructions, for your family, explaining how to make egg and cress sandwiches.</p>
<p>Key vocab</p>						
<p>Year 3</p>	<p>Objectives</p> <p>Discover some amazing facts about flowers and make close observations of different flowers with magnifiers. Learn about the work of artist Georgia O’Keeffe and create some beautiful watercolour paintings from life and press flowers for a future project.</p>	<p>Objectives</p> <p>Learn how insects and other creatures are important in the pollination of flowers. Discover the secrets of how bees communicate using a waggle dance and give it a go yourself. Create some stunning bee and flower models.</p> <p>Science Objectives</p> <p>i) Explore the part that</p>	<p>Objectives</p> <p>Check out some real plant specimens to discover what happens to flowers after pollination. Make a beautiful illustrated zigzag book to explain how fruits develop from pollinated flowers.</p> <p>Science Objectives</p> <p>i) Explore the part that flowers play in the life cycle of flowering plants</p>	<p>Objectives</p> <p>Explore the huge variety of different fruits – asking questions and making observational drawings and notes. Sort fruits according to your own criteria based on their similarities and differences.</p> <p>Science Objectives</p> <p>i) Explore the part that flowers play in the life cycle of flowering plants.</p>	<p>Objectives</p> <p>Begin to understand why fruits are so varied – to help with the dispersal of their seeds. Make your own paper seed and investigate wind dispersal by testing different versions to find the best flier.</p> <p>Science Objectives</p> <p>i) Explore the part that flowers play in the life cycle of flowering plants.</p>	<p>Objectives</p> <p>Test your knowledge on flowers, fruits and seeds with a quiz. Then it will be time to make preparations for the Art Exhibition. Work on your own group project to delight visitors, perhaps a quiz, a dance, a puppet display, a competition or some interesting</p>

	<p>Science Objectives i) Explore the part that flowers play in the life cycle of flowering plants.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Make systematic and careful observations. 2. Record findings using simple scientific language, drawings and labelled diagrams. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials. • Learn about great artists, architects and designers in history. 	<p>flowers play in the life cycle of flowering plants.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Identify differences, similarities or changes related to simple scientific ideas and processes. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials. 	<p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Record findings using simple scientific language, drawings and labelled diagrams. 2. Use straightforward scientific evidence to answer questions or to support findings. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • To improve mastery of art and design techniques, including drawing and painting. 	<p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask relevant questions and use different types of scientific enquiries to answer them. 2. Gather, record, classify and present data in a variety of ways to help answer questions. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • To improve their mastery of art and design techniques, including drawing and painting. <p>Extended Writing Opportunities Information texts: Make illustrated zigzag books that explain the development of fruits.</p>	<p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Set up simple practical enquiries and comparative and fair tests 2. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. 3. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. 	<p>labels and explanations.</p> <p>Science Objectives i) Explore the part that flowers play in the life cycle of flowering plants.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. <p>Extended Writing Opportunities Information texts: Make creative, informative posters that invite visitors to your exhibition and include key information that they will learn when they attend.</p>
<p>Key Vocab</p>						

Year 4	<p>Grouping Living Things To recognise that living things can be grouped in a variety of ways by sorting living things into a range of groups. • I can group living things in a range of ways. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions by using a range of methods to sort and group living things. • I can use a range of methods to sort living things.</p>	<p>Classifying Vertebrates To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment by generating questions to sort vertebrates in a classification key. • I can generate questions to use in a classification key. Identifying differences, similarities or changes related to simple scientific ideas and processes by identifying vertebrates by their similarities and differences. • I can identify vertebrates by observing their similarities and differences</p>	<p>Invertebrate Hunt To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment by using keys to identify invertebrates found in the local environment. • I can use a key to identify invertebrates. Using straightforward scientific evidence to answer questions by explaining how they have identified an invertebrate. • I can use evidence to identify an invertebrate.</p>	<p>Classification Keys To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment by creating classification keys. • I can create a classification key. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions by creating tables and keys showing the characteristics of living things. • I can show the characteristics of living things in a table and a key.</p>	<p>Local Habitat Survey To recognise that environments can change and that this can sometimes pose dangers to living things by identifying changes and dangers in the local habitat. • I can recognise positive and negative changes to the local environment. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and table by recording observations on a map and in a table. • I can record my observations in different ways.</p>	<p>Environmental Changes To recognise that environments can change and that this can sometimes pose dangers to living things by learning about environmental dangers and endangered species. • I can describe environmental dangers to endangered species. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions by writing about and orally presenting findings from research. • I can present my findings orally and in writing.</p>
Key vocab						
Year 5	<p>Objectives</p> <p>Dissect a flower and explore the fascinating world of flowering plant reproduction.</p>	<p>Objectives</p> <p>Investigate ways that plants reproduce asexually and continue to hone your botanical</p>	<p>Objectives</p> <p>Watch some online footage of insect and amphibian lifecycles to help create your own life cycle</p>	<p>Objectives</p> <p>Research mammalian and bird lifecycles for two of your local species and transform what you discover into beautiful</p>	<p>Objectives</p> <p>Time to do some travelling! You will need to find some interesting and quirky animals and plants from around the</p>	<p>Objectives</p> <p>Recognise your role as natural scientists during this block and hone your skills further</p>

	<p>Capture the key sexual structures of a flower and its life cycle in the form of a botanical drawing.</p> <p>Science Objectives i) Describe the life process of reproduction in some plants and animals.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Record data and results of increasing complexity using scientific diagrams and labels. Identify scientific evidence that supports or refute ideas or arguments. <p>Other Curriculum Areas Art & Design</p> <ul style="list-style-type: none"> Improve mastery of art and design techniques, including drawing, with a range of materials. 	<p>illustration skills. Have a go at growing new plants from a range of parent plant parts – you may be surprised at what will flourish!</p> <p>Science Objectives i) Describe the life process of reproduction in some plants and animals.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Art & Design</p> <ul style="list-style-type: none"> Improve mastery of art and design techniques, including drawing, with a range of materials. 	<p>illustrations for display. Set up an in-school habitat for your choice of insect and amphibian so that you can observe them over time.</p> <p>Science Objectives i) Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. ii) Describe the life process of reproduction in some plants and animals.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 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. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Art & Design</p> <ul style="list-style-type: none"> Improve mastery of art and design techniques, including drawing, painting and sculpture, with a range of materials. 	<p>natural history illustrations. Hone your research skills as you explore sexual reproduction in animals.</p> <p>Science Objectives i) Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. ii) Describe the life process of reproduction in some plants and animals.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 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. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Art & Design</p> <ul style="list-style-type: none"> Improve mastery of art and design techniques, including drawing, painting and sculpture, with a range of materials. 	<p>world and explore their life cycles online. Make sure you find plenty of images so that you can create an informative but artistic representation of their life cycles in the form of scientific illustrations.</p> <p>Science Objectives i) Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. ii) Describe the life process of reproduction in some plants and animals.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Record data and results of increasing complexity using scientific diagrams and labels. 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. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Art and Design</p> <ul style="list-style-type: none"> Improve mastery of art and design techniques, including drawing, 	<p>today. Learn about some significant naturalists and animal behaviourists and create in-role monologues that explore the importance and impact of their work within the scientific community.</p> <p>Science Objectives i) Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. ii) Describe the life process of reproduction in some plants and animals.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 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 and labels, classification keys, tables, scatter
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					<p>painting and sculpture, with a range of materials.</p> <p>Extended Writing Opportunities Chronological report: write up the life cycle of an insect, amphibian, mammal, bird or plant for a class information book</p>	<p>graphs, bar and line graphs.</p> <p>3. 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>4. Identify scientific evidence that has been used to support or refute ideas or arguments.</p> <p>Extended Writing Opportunities Biography: research a significant naturalist or animal behaviourist and create a poster that showcases their life, achievements and significance.</p>
Key vocab						
Year 6	<p>Objectives</p> <p>All sorts of pitches need good quality, durable and well looked after grass. Can you explore and classify a range of grasses and suggest the best for the job? Have a go at maintaining your own section of</p>	<p>Objectives</p> <p>Explore the science of sports kit materials and why some fabrics are better than others. Carry out an investigation and compare the materials different sports balls are made from. Examine the properties of Paralympian</p>	<p>Objectives</p> <p>Can you identify the invisible impact of forces on a sport? Explore how friction and air resistance can be used to improve performance and have a go at creating exact sizes of impact forces needed to score goals.</p>	<p>Objectives</p> <p>Explore the ways that nutrition, exercise and injury prevention impact on sports performance. Design an eating and exercise plan as well as your own warm up and warm down routine.</p> <p>Science Objectives i) Recognise the impact of</p>	<p>Objectives</p> <p>Are you born with sports talent or can training alone get you to the top? Explore the science behind biological and environmental characteristics in the sports arena.</p> <p>Science Objectives i) Recognise that living things produce offspring of the same</p>	<p>Objectives</p> <p>Can you ensure the stadium lights are positioned correctly to avoid distracting shadows? Can you make sure that the flood lights are bright enough and can be switched on and off manually and by</p>

	<p>grass and investigate the best conditions to tentalising turf.</p> <p>Science Objectives i) 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.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 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 and labels, 	<p>biomechanical materials and how they impact on disability sport.</p> <p>Science Objectives i) Compare and group together everyday materials on the basis of their properties. ii) Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 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 and labels, classification keys, tables, scatter graphs, bar and line graphs. Use test results to make predictions to 	<p>Science Objectives i) Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. ii) Identify the effects of air resistance, water resistance and friction, that act between moving surfaces. iii) Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 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 tables. Use test results to make predictions to set up further comparative and fair tests. Report and present findings from enquiries, including conclusions, 	<p>diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Identify scientific evidence that has been used to support or refute ideas or arguments. 	<p>kind, but normally offspring vary and are not identical to their parents.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Extended Writing Opportunity Information text: Create a sports information leaflet about the factors that impact on sports talent.</p>	<p>timer? Can you make the case for alternative forms of energy to run sports stadiums? The game is afoot!</p> <p>Science Objectives i) Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. ii) 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. iii) Use recognised symbols when representing a simple circuit in a diagram.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Take measurements, using scientific equipment, with increasing
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	<p>classification keys, tables, scatter graphs, bar and line graphs.</p> <p>4. Identify scientific evidence that has been used to support or refute ideas or arguments.</p>	<p>set up further comparative and fair tests.</p> <p>5. 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>6. Identify scientific evidence that has been used to support or refute ideas or arguments.</p>	<p>causal relationships and explanations of and degree of trust in results, in oral and written forms.</p> <p>6. Identify scientific evidence that has been used to support or refute ideas or arguments.</p>			<p>accuracy and precision.</p> <p>3. Record data and results of increasing complexity using scientific diagrams and labels.</p> <p>4. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms.</p> <p>5. Identify scientific evidence that has been used to support or refute ideas or arguments.</p> <p>Other Curriculum Areas Design and Technology</p> <ul style="list-style-type: none"> Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through
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						discussion, annotated sketches, cross-sectional and exploded diagrams and prototypes. Understand and use electrical systems in their products.
Key vocab						

Summer 2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
EYFS	<p>To predict what will happen to the gingerbread man if he went in a liquid</p> <p>Understanding the World objective.</p> <p>1.Understand some important processes and changes including changing states of matter</p>	<p>To find and identify signs of summer</p> <p>Understanding the World objective.</p> <p>1. Explore the natural world around them, making observations and drawing pictures of animals and plants</p>	<p>To explore what materials make the best houses</p> <p>Understanding the World objective.</p> <p>1.Explore collections of materials with similar and/or different properties.</p>	<p>To observe and talk about how broad beans grow</p> <p>Understanding the World objective.</p> <p>1.Explore the natural world around them, making observations and drawing pictures of animals and plants</p>	<p>To observe and talk about how broad beans grow</p> <p>Understanding the World objective.</p> <p>1.Explore the natural world around them, making observations and drawing pictures of animals and plants</p>	<p>To compare photos from September to now.</p> <p>To talk about how they have grown and changed</p> <p>Understanding the World objective.</p> <p>1.Explore the natural world around them, making observations and drawing pictures of animals and plants</p>

<p>Year 1</p>	<p>Objectives</p> <p>Look at photographs of everyone as babies. We all look very different! Consider the questions: How do we change as we get older? Do we only get older on our birthdays? Observe changes over time by comparing baby photos with current ones.</p> <p>Science Objectives i) Identify, name, draw and label the basic parts of the human body and say which parts of the body is associated with which sense.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Identify and classify. 3. Use their observations and ideas to suggest 	<p>Objectives</p> <p>Look carefully at our bodies and collect data about head size, hand and foot size, hair and eye colour. Consider the question: If someone has big feet, do they also need larger gloves? Look for patterns in the measurements collected.</p> <p>Science Objectives i) identify, name, draw and label the basic parts of the human body and say which parts of the body is associated with which sense.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Identify and classify. 3. Use observations and ideas to suggest answers to questions. 4. Gather and record data to help answer questions. <p>Other Curriculum Areas Maths</p>	<p>Objectives</p> <p>Listen for sounds all around us - what can we hear with our ears? Can we hear the playtime bell? Consider simple factors affecting how well we hear the whistle and explore what happens when we change just one thing at a time.</p> <p>Science Objectives i) Identify, name, draw and label the basic parts of the human body and say which parts of the body is associated with which sense.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Perform simple tests. 3. Use their observations and ideas to suggest answers to questions. 4. Gather and record data to help answer questions. 	<p>Objectives</p> <p>Explore different foods using different senses and classify into groups. Set out a Senses Market Stall in the classroom and then eat the produce! Discover that our tongues are used for sensing taste differences.</p> <p>Science Objectives i) Identify, name, draw and label the basic parts of the human body and say which parts of the body is associated with which sense.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Observe closely, using simple equipment. 2. Identify and classify. 3. Use their observations and ideas to suggest answers to questions. 	<p>Objectives</p> <p>Place different items (noisy, textured, smelly) in a feely bag and talk about how we know what those items are. What senses are we using? List the five senses together and go outside to explore the environment.</p> <p>Science Objectives i) Identify, name, draw and label the basic parts of the human body and say which parts of the body is associated with which sense.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Use their observations and ideas to suggest answers to questions. 	<p>Objectives</p> <p>Discuss what we know about all five senses. Accept a challenge to make a sensory board and bottles for a local community group. Gather together safe but stimulating things to engage the different senses. Classify these together into the five sensory groups.</p> <p>Science Objectives i) identify, name, draw and label the basic parts of the human body and say which parts of the body is associated with which sense.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify.

	<p>answers to questions.</p> <p>4. Gather and record data to help answer questions.</p>	<ul style="list-style-type: none"> • Compare, describe and solve practical problems for length. • Measure and begin to record lengths. 				<p>5. Use their observations and ideas to suggest answers to questions.</p> <p>6. Gather and record data to help answer questions.</p> <p>Other Curriculum Areas</p> <p>Design and Technology Design: Design purposeful, functional, appealing products for themselves and other users based on design criteria. Make: Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Evaluate: Evaluate their ideas and products against design criteria.</p> <p>Extended Writing Opportunities</p> <p>Labels, lists and signs: Make a sign to go with the final sensory board. Letters: Write a letter to the community explaining the rationale behind the sensory board. Stories with repeating patterns: Use the items on the sensory board as prompts to orally retell</p>
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						a familiar story before writing it down.
Year 2	<p>Objectives</p> <p>Take large tubs and tyres into the playground and plant edible plants! Learn about the right conditions for growth and attracting the right mini-beasts to the allotment.</p> <p>Science Objectives</p> <p>i) 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> <p>ii) Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>iii) Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p> <p>Working Scientifically</p>	<p>Objectives</p> <p>Tend to the allotment and review the plant growth. Are there any mini-beasts the allotment habitat would benefit from? How will you attract them? Make micro-habitats to encourage them to live in the allotment.</p> <p>Science Objectives</p> <p>i) 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> <p>ii) Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>iii) Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p> <p>Working Scientifically</p> <p>1. Ask simple questions and recognise that</p>	<p>Objectives</p> <p>Find out more about farming first-hand and play farms in the classroom. Understand why farms are so important to the food chain and why farmers think protecting the environment is so important.</p> <p>Science Objectives</p> <p>i) 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> <p>ii) Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>iii) Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p> <p>Working Scientifically</p> <p>1. Ask simple questions and recognise that they can be answered in different ways.</p>	<p>Objectives</p> <p>Think about some simple food chains and make a food chain using laminated cards and string. Challenge each other to string them up in the right order.</p> <p>Science Objectives</p> <p>i) 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> <p>ii) Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>iii) Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p> <p>Working Scientifically</p> <p>1. Ask simple questions and recognise that they can be answered in different ways.</p> <p>2. Observe closely, using simple equipment.</p> <p>3. Perform simple tests.</p>	<p>Objectives</p> <p>Think further about food chains and look at the transfer of energy from the sun, through the members of the food chain, and back into the ground. Can you represent this cycle in a dance?</p> <p>Science Objectives</p> <p>i) 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> <p>ii) Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>iii) Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p> <p>Working Scientifically</p> <p>1. Ask simple questions and recognise that they can be answered in different ways</p> <p>2. Observe closely, using simple equipment.</p> <p>3. Perform simple tests.</p>	<p>Objectives</p> <p>Harvest the edible foods you have been growing in the allotment. Study, smell and feel them before turning them into a class snack! Why not perform the Food Chain dance to an audience before you eat?</p> <p>Science Objectives</p> <p>i) 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> <p>ii) Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>iii) Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p>

	<ol style="list-style-type: none"> 1. Create a tub allotment in the playground and plant edible plants. 2. Make bird-scaring sculptures with found and recycled materials. 3. Understand that allotments are habitats and that they will attract mini-beasts. 4. Understand that growing conditions need to be right for plants to grow. 	<ol style="list-style-type: none"> 1. they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<ol style="list-style-type: none"> 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<ol style="list-style-type: none"> 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<ol style="list-style-type: none"> 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. 	<p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask simple questions and recognise that they can be answered in different ways. 2. Observe closely, using simple equipment. 3. Perform simple tests. 4. Identify and classify. 5. Use their observations and ideas to suggest answers to questions. 6. Gather and record data to help answer questions. <p>Extended Writing Opportunities Information text: Make posters persuading people to grow more food in their gardens and allotments; include useful tips on how to be successful.</p>
Key vocab						
Year 3	<p>Objectives</p> <p>Discover some amazing facts about flowers and make close observations of different flowers with magnifiers. Learn</p>	<p>Objectives</p> <p>Learn how insects and other creatures are important in the pollination of flowers. Discover the secrets of how bees communicate</p>	<p>Objectives</p> <p>Check out some real plant specimens to discover what happens to flowers after pollination. Make a beautiful illustrated zigzag book to</p>	<p>Objectives</p> <p>Explore the huge variety of different fruits – asking questions and making observational drawings and notes. Sort fruits according to your own criteria based on</p>	<p>Objectives</p> <p>Begin to understand why fruits are so varied – to help with the dispersal of their seeds. Make your own paper seed and investigate wind dispersal by</p>	<p>Objectives</p> <p>Test your knowledge on flowers, fruits and seeds with a quiz. Then it will be time to make preparations for the Art Exhibition.</p>

	<p>about the work of artist Georgia O’Keeffe and create some beautiful watercolour paintings from life and press flowers for a future project.</p> <p>Science Objectives i) Explore the part that flowers play in the life cycle of flowering plants.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Make systematic and careful observations. 2. Record findings using simple scientific language, drawings and labelled diagrams. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials. • Learn about great artists, architects and designers in history. 	<p>using a waggle dance and give it a go yourself. Create some stunning bee and flower models.</p> <p>Science Objectives i) Explore the part that flowers play in the life cycle of flowering plants.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Identify differences, similarities or changes related to simple scientific ideas and processes. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials. 	<p>explain how fruits develop from pollinated flowers.</p> <p>Science Objectives i) Explore the part that flowers play in the life cycle of flowering plants</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Record findings using simple scientific language, drawings and labelled diagrams. 2. Use straightforward scientific evidence to answer questions or to support findings. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • To improve mastery of art and design techniques, including drawing and painting. 	<p>their similarities and differences.</p> <p>Science Objectives i) Explore the part that flowers play in the life cycle of flowering plants.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Ask relevant questions and use different types of scientific enquiries to answer them. 2. Gather, record, classify and present data in a variety of ways to help answer questions. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • To improve their mastery of art and design techniques, including drawing and painting. <p>Extended Writing Opportunities Information texts: Make illustrated zigzag books that explain the development of fruits.</p>	<p>testing different versions to find the best flier.</p> <p>Science Objectives i) Explore the part that flowers play in the life cycle of flowering plants.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Set up simple practical enquiries and comparative and fair tests 2. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. 3. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. 	<p>Work on your own group project to delight visitors, perhaps a quiz, a dance, a puppet display, a competition or some interesting labels and explanations.</p> <p>Science Objectives i) Explore the part that flowers play in the life cycle of flowering plants.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. <p>Extended Writing Opportunities Information texts: Make creative, informative posters that invite visitors to your exhibition and include key information that they will learn when they attend.</p>
Key Vocab						

<p>Year 4</p>	<p>Exciting Electricity To report on findings, including oral and written explanations in the context of preparing a presentation on how electricity is generated.</p>	<p>. Electrical Appliances Identify common appliances that run on electricity by learning to distinguish between appliances that use and do not use electricity, the different types of electricity and identify how to stay safe when using electricity. • I can identify electrical appli</p>	<p>Electrical Circuits Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. 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 by visualising and testing circuits to see if the circuit is complete.</p>	<p>Conductors and Insulators Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Recognise some common conductors and insulators, and associate metals with being good conductors by testing different materials as part of a circuit to see whether or not they conduct electricity.</p>	<p>Splendid Switches Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit by creating circuits which contain a switch.</p>	<p>. Investigating Switches Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. 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 in the context of making and investigating different switches.</p>
<p>Key vocab</p>						
<p>Year 5</p>	<p>Objectives</p> <p>Are you ready for a whistle stop tour of the animal kingdom in a quest to become a gestation guru? How will you present your findings in an engaging and fun way?</p> <p>Science Objectives i) Describe the changes as humans develop to old age.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Record data using tables, scatter graphs, bar and line graphs. Report and present findings from enquiries, including 	<p>Objectives</p> <p>You now know a baby’s gestation period, but what happens while it is a foetus? Explore the key stages of foetal development and present your research in the form of annotated diagrams.</p> <p>Science Objectives i) Describe the changes as humans develop to old age.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Record data using scientific diagrams and labels. Identify scientific evidence that has been used to support or refute ideas or argument. 	<p>Objectives</p> <p>Are you ready to analyse your own growth data and demonstrate in graphs and charts how the human body develops and grows from birth to five? This section of your book will need some clear and well researched fact files.</p> <p>Science Objectives i) Describe the changes as humans develop to old age.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Record data using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. Report and present findings from enquiries, including conclusions, 	<p>Objectives</p> <p>Changes during puberty can be a sensitive issue – you need to understand the facts fully and recognise the physical as well as emotional impact. Create a Q&A section for your book that covers all the issues raised by puberty.</p> <p>Science Objectives i) Describe the changes as humans develop to old age.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Record data using scientific diagrams and labels. Identify scientific evidence that has been used to support or refute ideas or argument. <p>Other Curriculum Areas Computing</p>	<p>Objectives</p> <p>What happens to our bodies as we get old? Can you research and create a ‘things to expect as you age’ section for your book? It will need to include physical and mental changes to the body. You will also need to think about how we care for the elderly and explore attitudes towards older generations across the world.</p> <p>Science Objectives i) Describe the changes as humans develop to old age.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Identify scientific evidence that has been used to support or refute ideas or argument. <p>Other Curriculum Areas English</p> <ul style="list-style-type: none"> Plan writing by identifying the audience for and 	<p>Objectives</p> <p>Reflect back on your work in this block and pinpoint the key milestones in a human life and how they impact on the body? Have a go at creating a graphic for your book on human growth.</p> <p>Science Objectives i) Describe the changes as humans develop to old age.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Record data using scientific diagrams and labels. Identify scientific evidence that has been used to

	<p>conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms.</p> <p>3. Identify scientific evidence that has been used to support or refute ideas or argument.</p> <p>Other Curriculum Areas Computing</p> <ul style="list-style-type: none"> Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. 	<p>Other Curriculum Areas Computing</p> <ul style="list-style-type: none"> Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. 	<p>causal, relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</p> <p>3. Identify scientific evidence that has been used to support or refute ideas or argument.</p> <p>Other Curriculum Areas English</p> <ul style="list-style-type: none"> Plan writing by identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own. Evaluate and edit by assessing the effectiveness of their own and others' writing. 	<ul style="list-style-type: none"> Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information 	<p>purpose of the writing, selecting the appropriate form and using other similar writing as models for their own.</p> <ul style="list-style-type: none"> Draft and write by using further organisational and presentational devices to structure text and to guide the reader. 	<p>support or refute ideas or argument.</p> <p>Other Curriculum Areas Computing</p> <ul style="list-style-type: none"> Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. <p>Extended Writing Opportunities Non-fiction various: Write sections for their non-fiction book on the human lifecycle e.g. 'things to expect in old age', 'key physical and emotional changes during puberty' etc</p>
Key vocab						
Year 6	<p>Objectives</p> <p>Explore the composition of blood and the role it has to play in the human</p>	<p>Objectives</p> <p>Explore the structure and function of the human heart before creating your own heart</p>	<p>Objectives</p> <p>Explore how nutrients and water are transported throughout your body in your blood and the</p>	<p>Objectives</p> <p>Have you ever wondered what your blood gets up to inside your body? Here is your chance to join your platelets</p>	<p>Objectives</p> <p>Discover the true impact (both visible and hidden) of diet, exercise and lifestyle on the human body. Produce a</p>	<p>Objectives</p> <p>Before teaching this session, please refer to your school's PSHE policy. You</p>

	<p>body. Create a painting of blood as seen under a powerful microscope and include a detailed description to accompany it.</p> <p>Science Objectives i) Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • Create sketch books to record their observations and use them to review and revisit ideas. Improve their mastery of art and design techniques, including drawing and painting. <p>Extended Writing Opportunity Information/explanation text: Create an information leaflet for</p>	<p>sculptures. Can you feel the rhythm of your heartbeat? Discover how and why it changes across activity and compare human heartbeats with those of other animals. Create your own sound installation to celebrate the inner rhythm in us all.</p> <p>Science Objectives i) Identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Report and present findings from enquiries, including conclusions, causal relationships and explanations of results. 3. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Art</p>	<p>processes used to pass in and out of your blood through capillary walls. Create your own abstract art to celebrate these processes.</p> <p>Science Objectives i) Describe the ways in which nutrients and water are transported within animals, including humans.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 2. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • Improve mastery of art and design techniques. 	<p>on their journey around your body. Share your discoveries in the form of a dramatic re-enactment.</p> <p>Science Objectives i) Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. ii) Describe the ways in which nutrients and water are transported within animals, including humans.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Computing</p> <ul style="list-style-type: none"> • Select, use and combine a variety of software on a range of digital devices to design and create a range of content that accomplishes given goals, including collecting, analysing, evaluating and presenting data and information. 	<p>creative TV advert that explores this impact and how to keep our bodies healthy.</p> <p>Science Objectives i) Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. ii) Describe the ways in which nutrients and water are transported within animals, including humans.</p> <p>Working Scientifically 1. Identify scientific evidence that has been used to support or refute ideas or arguments.</p> <p>Other Curriculum Areas Computing</p> <ul style="list-style-type: none"> • Select, use and combine a variety of software on a range of digital devices to design and create a range of content that accomplishes given goals, including collecting, analysing, evaluating and presenting data and information. <p>PSHE</p> <ul style="list-style-type: none"> • Know the importance of physical activity and diet for a healthy lifestyle. 	<p>may wish to discuss this with your subject leader.</p> <p>Explore the truths and myths about the effects of drugs and alcohol on the human body, before creating your own artistic ‘montage’ advert that reflects this topic in a creative and informative manner. Your art exhibition is now complete and ready for display!</p> <p>Science Objectives i) Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. ii) Describe the ways in which nutrients and water are transported within animals, including humans.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> 1. Identify scientific evidence that has been used to support or refute ideas or arguments. <p>Other Curriculum Areas Art</p> <ul style="list-style-type: none"> • Improve mastery of art and design techniques.
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	<p>a doctor's surgery explaining the composition of blood and the role it has to play in the human body</p>	<ul style="list-style-type: none"> • Create sketch books to record their observations and use them to review and revisit ideas. Improve mastery of art and design techniques, including sculpture using clay. <p>Extended Writing Opportunity Descriptive writing: Collect words to describe the impact on their bodies of physical exertion and use these to write a short passage describing how you might feel if being chased/trying to win an important race/preparing to go on stage.</p>				<p>PSHE</p> <ul style="list-style-type: none"> • Take part in drugs education <p>Extended Writing Opportunity Information text: Create a booklet that describes the impact of drugs and alcohol on the human body.</p>
<p>Key vocab</p>						