



**Science Coverage for EYFS and Year 1/2**  
**2023 - 2024**  
**National Curriculum/Milestone 1 Statements**



**EYFS Understanding the World**

Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.

	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>Scientific Knowledge</b>	<p>Ourselves.            Naming body parts and their uses.            Naming and investigating the senses.</p>	<p>Seasonal change – Autumn.            Light and dark.            Identifying and naming sources of light.</p>	<p>Seasonal change – Winter.            Floating and sinking.            Absorbency.</p>	<p>Seasonal change – Spring.            Materials – naming and describing.            Magnetism.</p>	<p>Seasonal change – Summer.            Plants and growing.            Naming simple parts of a plant.</p>	<p>Animals, mini-beasts and habitats.            Exploring different habitats around school.</p>
<b>Working Scientifically</b>	<p><b>To Plan</b>            To ask questions to find out more, including ‘why’ questions.            To describe what they see using a range of vocabulary.            To choose the right resources to carry out their plan.</p> <p><b>To Do</b>            To use new vocabulary when observing.            To compare quantities using the language of ‘more than’ and ‘fewer than’.            To develop fine motor skills to use tools safely and competently.            To make comparisons between objects relating to size, length, weight and capacity.</p> <p><b>To Review</b>            To write words and short sentences using known sounds to record simple observations.            To begin to describe a sequence of events.            To present information using drawings.            To articulate their ideas and thoughts using well-formed sentences.</p>					

**Year 1/2**

<b>Scientific Knowledge</b>			<b><u>Working Scientifically</u></b>
<b>Autumn Term</b>	<b>Spring Term</b>	<b>Summer Term</b>	
<b>Week 1</b>	<b>Plants</b> Introduce the names and images of wild and garden plants.	<b>Plants</b> Introduce the names and images of evergreen and deciduous trees.	<p><b>By growing seeds, bulbs and vegetables throughout the year:</b></p> <ul style="list-style-type: none"> <li>• *(Y2) Observe and describe how seeds and bulbs grow into mature plants.</li> <li>• *(Y2) Find out and describe how plants need water, light, a suitable temperature to grow and stay healthy.</li> </ul> <p><b>In PE lessons:</b></p> <ul style="list-style-type: none"> <li>• *(Y2) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</li> </ul> <p><b>Through experiment tables set up at various points throughout the year:</b></p> <ul style="list-style-type: none"> <li>• Notice how things move, using</li> </ul>
<b>Week 2</b>	<b>Milestone 1 (Basic) Plants</b> Introduce the structure of flowering plants.	<b>Milestone 1 (Basic) Plants</b> Introduce the structure of trees.	
<b>Week 3</b>	<b>Animals, including Humans</b> Introduce the names and images of birds, fish, amphibians, reptiles, mammals and invertebrates (Lesson 1).	<b>Animals, including Humans</b> *(Y1) Introduce the groups: Carnivore, Herbivore and Omnivore.	
<b>Week 4</b>	<b>Animals, including Humans</b> Introduce the names and images of birds, fish, amphibians, reptiles, mammals and invertebrates (Lesson 2).	<b>Animals, including Humans</b> *Introduce parts of the human body and associate parts of the body with the five senses.	

<b>Week 5</b>	<b><i>Animals, including Humans</i></b> *(Y1) Describe and compare the structure of birds, fish, amphibians, reptiles, mammals and invertebrates.	<b>Milestone 1 (Basic) <i>Animals, including Humans</i></b> *(Y2) Describe the offspring and growth of animals and humans into adulthood.	<b>Milestone 1 (Basic/Advancing) <i>Living Things and Their Habitats</i></b> *(Y2) 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 (Lesson 3).	<p>simple comparisons such as faster and slower.</p> <ul style="list-style-type: none"> <li>• Compare how different things move.</li> </ul> <p><b>Looking at weather and the signs of the season:</b></p>
<b>Week 6</b>	<b><i>Everyday Materials</i></b> Introduce a range of everyday materials, including wood, plastic, glass, metal, water and rock.	<b>Milestone 1 (Basic) <i>Animals, including Humans</i></b> Identify how humans resemble their parents in many features.	<b>Milestone 1 (Basic) <i>Sound and Hearing</i></b> Observe and name a variety of sources of sound, noticing we hear with our ears.	
<b>Week 7</b>	<b><i>Everyday Materials</i></b> *(Y1/2) Distinguish between an object and the material from which it is made (and in doing so, identify and compare the uses of a variety of everyday materials.)	<b><i>Everyday Materials</i></b> *(Y1) Describe the simple properties of a variety of everyday materials.	<b>Milestone 1 (Basic) <i>Sound and Hearing</i></b> Discriminate between similar sounds.	<ul style="list-style-type: none"> <li>• Observe the apparent movement of the sun throughout the day.</li> </ul>
<b>Week 8</b>	<b>Milestone 1 (Basic) <i>Electrical Circuits</i></b> Identify common appliances that run on electricity.	<b><i>Everyday Materials</i></b> *(Y1) Compare and group together a variety of everyday materials on the basis of their simple physical properties.	<b>Milestone 1 (Basic) <i>Sound and Hearing</i></b> Discriminate between different sounds.	<p><b>Year 1 Working Scientifically National Curriculum Statements:</b></p>
<b>Week 9</b>	<b>Milestone 1 (Basic) <i>Electrical Circuits</i></b> Construct a simple series- circuit.	<b>Milestone 1 (Basic) <i>Light and Seeing</i></b> Observe and name a variety of sources of light.	<b>Milestone 1 (Basic) <i>Everyday Materials</i></b> Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	
<b>Week 10</b>	<b>Milestone 1 (Basic) <i>Electrical Circuits</i></b> Experiment with simple series	<b>Milestone 1 (Basic) <i>Light and Seeing</i></b> Explain that we see sources of	<b>Milestone 1 (Advancing) <i>Light and Seeing</i></b> Experiment with ways to block	

	circuits.	light because the light travels from the source to our eyes.	light and make shadows.	<ul style="list-style-type: none"><li>• Perform simple tests.</li><li>• Identify and classify.</li><li>• Use their observations and ideas to suggest answers to questions.</li><li>• Gather and record data to help in answering questions.</li></ul>
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**Science Coverage for Year 2/3**  
**2023 - 2024**  
**Milestone 1 Statements**

	<u>Scientific Knowledge</u>			<u>Working Scientifically</u>
	Autumn Term	Spring Term	Summer Term	
<b>Week 1</b>	<b>Milestone 1 (Advancing) Plants</b> What are the similarities and differences between deciduous and evergreen trees?	<b>Milestone 1 (Advancing) Plants</b> *(Y2) What are the similarities and differences in the growth of seeds and bulbs?	<b>Milestone 1 (Advancing) Animals, including Humans</b> Explain why the sense of touch may be important to a blind person.	<b>Through experiment tables set up at throughout the year:</b> <ul style="list-style-type: none"> <li>Experiment with pushing objects gently and hard. Record and explain what happens.</li> <li>Experiment with a slope and record how this changes the speed at which an object rolls.</li> <li>Compare the movement of remote-control cars and a helicopter drone. Explain the differences in movement.</li> </ul>
<b>Week 2</b>	<b>Milestone 1 (Advancing) Plants</b> Think of some ways to categorise plants.	<b>Milestone 1 (Advancing) Plants</b> *(Y2) How could you try to revive these plants? <i>Give pupils a dried-out plant, one that has been in the fridge, one that has been kept in the dark etc.</i>	<b>Milestone 1 (Advancing) Animals, including Humans</b> *(Y2) Categorise food types and explain why each group is important to humans.	
<b>Week 3</b>	<b>Milestone 1 (Advancing) Animals, including Humans</b> Point out explain the main differences between birds, fish, amphibians, reptiles, mammals, and invertebrates.	<b>Milestone 1 (Advancing) Plants</b> *(Y3) Taking a selection of (real) different flowering plants, what are the structural features?	<b>Milestone 1 (Advancing) Animals, including Humans</b> *(Y2) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.  Describe a healthy diet for a human.	
<b>Week 4</b>	<b>Milestone 1 (Advancing) Animals, including Humans</b> Compare and contrast mammals with amphibians.	<b>Milestone 1 (Advancing) Animals, including Humans</b> *(Y2) Describe the basic needs of animals, including humans, for survival (water, food and air).	<b>Milestone 1 (Advancing) Living Things and Their Habitats</b> *(Y2) Explain why a habitat for a plant or animal is suitable.	
				<b>Year 2 Working Scientifically National Curriculum Statements:</b> <ul style="list-style-type: none"> <li>Ask simple</li> </ul>

			*(Y2) Categorise animals/plants according to the conditions they require.	<p>questions and recognising that they can be answered in different ways observing closely, using simple equipment.</p> <ul style="list-style-type: none"> <li>• Perform simple tests.</li> <li>• Identify and classify.</li> <li>• Use their observations and ideas to suggest answers to questions.</li> <li>• Gather and record data to help in answering questions.</li> </ul> <p><b>Year 3 Working Scientifically National Curriculum Statements</b></p> <ul style="list-style-type: none"> <li>• Ask relevant questions and using different types of scientific enquiries to answer them.</li> <li>• Set up simple practical enquiries, comparative and fair tests.</li> <li>• Make systematic and careful observations and, where appropriate,</li> </ul>
<b>Week 5</b>	<p><b>Milestone 1 (Advancing) <i>Animals, including Humans</i></b> Explain the main differences between adult animals and humans and their offspring.</p>	<p><b>Milestone 1 (Advancing) <i>Animals, including Humans</i></b> Show how carnivores, herbivores and omnivores are similar and different.</p>	<p><b>Milestone 1 (Advancing) <i>Living Things and Their Habitats</i></b> *(Y2) Explain the differences in a food chain for an herbivore and a carnivore.</p>	
<b>Week 6</b>	<p><b>Milestone 1 (Advancing) <i>Animals, including Humans</i></b> *(Y2) Present similarities and differences between parents and their children.</p>	<p><b>Milestone 1 (Advancing) <i>Living Things and Their Habitats</i></b> *(Y2) Compare the types of food that different animals require.</p>	<p><b>Milestone 1 (Advancing) <i>Materials</i></b> *(Y2) Compare and contrast the different properties of materials and use this to explain why certain materials are used for particular purposes.</p> <p>Experiment with changing the shape of solid objects. Organise and summarise your findings.</p>	
<b>Week 7</b>	<p><b>Milestone 1 (Advancing) <i>Materials</i></b> Explain how a glass bottle is made from sand. Choose some objects and explain how they were made from their original material.</p>	<p><b>Milestone 1 (Advancing) <i>Living Things and Their Habitats</i></b> *(Y2) Organise things of your choice into groups: living, dead and never been alive.</p>	<p><b>Milestone 1 (Advancing) <i>Seasons and Space</i></b> Organise images or objects from each season into categories. Explain your categories.</p>	
<b>Week 8</b>	<p><b>Milestone 1 (Advancing) <i>Materials</i></b> Decide how to group the materials on the basis of their properties. Explain your reasons for your groups. Explain why the properties of materials are useful for deciding which materials to use for an object. Give examples.</p>	<p><b>Milestone 1 (Advancing) <i>Electrical Circuits</i></b> Categorise electrical appliances. Explain the reasons for your categories.</p> <p>Compare and contrast some appliances in each of your categories.</p>	<p><b>Milestone 1 (Advancing) <i>Seasons and Space</i></b> Show how you might know (apply) roughly what time it is in a day by looking at the position of the sun.</p>	

<p><b>Week 9</b></p>	<p><b>Milestone 1 (Advancing) Sound and Hearing</b> Categorise sounds.</p>	<p><b>Milestone 1 (Advancing) Electrical Circuits</b> Modify a circuit to add components.  Experiment with and categorise the effect adding more components has.</p>	<p><b>Milestone 1 (Basic/Advancing) Seasons and Space</b> Compare and contrast weather and day length across the four seasons.  Identify patterns in day length across the four seasons.</p>	<p>taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <ul style="list-style-type: none"> <li>• Gather, record, classify and present data in a variety of ways to help in answering questions.</li> <li>• Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</li> <li>• Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</li> <li>• Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</li> <li>• Identify</li> </ul>
<p><b>Week 10</b></p>	<p><b>Milestone 1 (Advancing) Sound and Hearing</b> Compare and contrast sounds based on your own criteria (pupils choose).</p>	<p><b>Milestone 1 (Deep) Electrical Circuits</b> Experiment with broken circuits.</p>	<p><b>Milestone 1 (Advancing) Light and Seeing</b> *(Y3) Experiment with ways to block light from reaching our eyes. Point out how this demonstrates that light travels from a source to our eyes.</p>	

				<p>differences, similarities or changes related to simple scientific ideas and processes.</p> <ul style="list-style-type: none"><li>• Use straightforward scientific evidence to answer questions or to support their findings.</li></ul>
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Science Coverage for Year 3/4  
2023 - 2024  
National Curriculum Statements

<u>Scientific Knowledge</u>				<u>Working Scientifically</u>
Autumn Term	Spring Term	Summer Term		
<b>Week 1</b>	<b>Year 3 Plants</b> Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.	<b>Year 3 Plants</b> *(Y3) Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.	<b>Year 4 Living things and their Habitats</b> Recognise that living things can be grouped in a variety of ways.	<ul style="list-style-type: none"> <li>• Ask relevant questions and using different types of scientific enquiries to answer them.</li> <li>• Set up simple practical enquiries, comparative and fair tests.</li> <li>• Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</li> <li>• Gather, record, classify and present data in a variety of ways to help in answering questions.</li> <li>• Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</li> <li>• Report on findings from enquiries, including oral and written explanations,</li> </ul>
<b>Week 2</b>	<b>Year 3 Plants</b> *(Y3) Investigate the way in which water is transported within plants.	<b>Year 3 Plants</b> Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	<b>Year 4 Living things and their Habitats</b> Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.	
<b>Week 3</b>	<b>Year 3 Animals, including Humans</b> 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.	<b>Year 4 Animals, including Humans</b> *(Y4) Construct and interpret a variety of food chains, identifying producers, predators and prey.	<b>Year 4 Living things and their Habitats</b> *(Y4) Recognise that environments can change and that this can sometimes pose dangers to living things.	
<b>Week 4</b>	<b>Year 3 Animals, including Humans</b>	<b>Year 4 Animals, including Humans</b>	<b>Year 3 Light</b> *(Y3) Recognise that shadows	

	*(Y3) Identify that humans and some other animals have skeletons and muscles for support, protection and movement.	*(Y4) Describe the simple functions of the basic parts of the digestive system in humans.	are formed when the light from a light source is blocked by an opaque object.	<p>displays or presentations of results and conclusions.</p> <ul style="list-style-type: none"> <li>• Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</li> <li>• Identify differences, similarities or changes related to simple scientific ideas and processes.</li> <li>• Use straightforward scientific evidence to answer questions or to support their findings.</li> </ul>
<b>Week 5</b>	<p><b>Year 4 Animals, including Humans</b></p> <p>Identify the different types of teeth in humans and their simple functions.</p>	<p><b>Year 3 Forces and Magnets</b></p> <p>*(Y3) Observe how magnets attract or repel each other and attract some materials and not others.</p> <p>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><b>Year 3 Light</b></p> <p>*(Y3) Find patterns in the way that the size of shadows change.</p>	
<b>Week 6</b>	<p><b>Year 3 Forces and Magnets</b></p> <p>Compare how things move on different surfaces.</p>	<p><b>Year 4 States of Matter</b></p> <p>Compare and group materials together, according to whether they are solids, liquids or gases.</p>	<p><b>Year 4 States of Matter</b></p> <p>*(Y4) Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>	
<b>Week 7</b>	<p><b>Year 3 Forces and Magnets</b></p> <p>Describe magnets as having two poles. Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p> <p>*(Y3) Notice that some forces need contact between two objects, but magnetic forces can</p>	<p><b>Year 4 States of Matter</b></p> <p>*(Y4) Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).</p>	<p><b>Year 4 Electricity</b></p> <p>Identify common appliances that run on electricity.</p> <p>Recognise some common conductors and insulators, and associate metals with being good conductors.</p>	

	act at a distance.			
<b>Week 8</b>	<p><b>Year 3 Rocks</b> *(Y3) Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</p>	<p><b>Year 3 Light</b> Recognise that they need light in order to see things and that dark is the absence of light.  Notice that light is reflected from surfaces.</p>	<p><b>Year 4 Sound</b> *(Y4) Identify how sounds are made, associating some of them with something vibrating.  *(Y4) Recognise that vibrations from sounds travel through a medium to the ear.</p>	
<b>Week 9</b>	<p><b>Year 3 Rocks</b> *(Y3) Describe in simple terms how fossils are formed when things that have lived are trapped within rock.</p>	<p><b>Year 3 Light</b> Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.</p>	<p><b>Year 4 Sound</b> *(Y4) Recognise that sounds get fainter as the distance from the sound source increases.</p>	
<b>Week 10</b>	<p><b>Year 3 Rocks</b> Recognise that soils are made from rocks and organic matter.</p>	<p><b>Year 4 Electricity</b> 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.  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.</p>	<p><b>Year 4 Sound</b> *(Y4) Find patterns between the pitch of a sound and features of the object that produced it.  *(Y4) Find patterns between the volume of a sound and the strength of the vibrations that produced it</p>	

**Science Coverage for Year 4/5**  
**2023 - 2024**  
**National Curriculum Statements**

<u>Scientific Knowledge</u>				<u>Working Scientifically</u>
Autumn Term	Spring Term	Summer Term		
<b>Week 1</b>	<b>Year 4 Living things and their Habitats</b> Recognise that living things can be grouped in a variety of ways.	<b>Year 5 Living things and their Habitats</b> *(Y5) Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.	<b>Year 4 Animals, including Humans</b> *(Y4) Describe the simple functions of the basic parts of the digestive system in humans.  Identify the different types of teeth in humans and their simple functions.	<b>Year 4</b> <ul style="list-style-type: none"> <li>Ask relevant questions and using different types of scientific enquiries to answer them.</li> <li>Set up simple practical enquiries, comparative and fair tests.</li> <li>Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</li> <li>Gather, record, classify and present data in a variety of ways to help in answering questions.</li> <li>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</li> <li>Report on findings from enquiries, including oral</li> </ul>
<b>Week 2</b>	<b>Year 4 Living things and their Habitats</b> Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.	<b>Year 5 Living things and their Habitats</b> *(Y5) Describe the life process of reproduction in some plants and animals.	<b>Year 5 Animals, including Humans</b> Describe the changes as humans develop to old age.	
<b>Week 3</b>	<b>Year 4 Living things and their Habitats</b> *(Y4) Recognise that environments can change and that this can sometimes pose dangers to living things.	<b>Year 4 Animals, including Humans</b> *(Y4) Construct and interpret a variety of food chains, identifying producers, predators and prey.	<b>Year 5 Properties and Change of Materials</b> *(Y5) Demonstrate that dissolving, mixing and changes of state are reversible changes.	
<b>Week 4</b>	<b>Year 4 States of Matter</b>	<b>Year 5 Properties and Change of</b>	<b>Year 5 Properties and Change of</b>	

	Compare and group materials together, according to whether they are solids, liquids or gases.	<b>Materials</b> *(Y5) Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.	<b>Materials</b> *(Y5) 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.	and written explanations, displays or presentations of results and conclusions. <ul style="list-style-type: none"> <li>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</li> <li>Identify differences, similarities or changes related to simple scientific ideas and processes.</li> <li>Use straightforward scientific evidence to answer questions or to support their findings.</li> </ul>
<b>Week 5</b>	<b>Year 4 States of Matter</b> *(Y4) Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).	<b>Year 5 Properties and Change of Materials</b> *(Y5) Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.	<b>Year 5 Forces</b> *(Y5) Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.	<b>Year 5</b> <ul style="list-style-type: none"> <li>Plan enquiries, including recognising and controlling variables where necessary.</li> <li>Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work.</li> <li>Take measurements, using a range of scientific equipment, with increasing accuracy and precision.</li> <li>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models.</li> <li>Report findings from enquiries, including oral and</li> </ul>
<b>Week 6</b>	<b>Year 4 States of Matter</b> *(Y4) Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	<b>Year 5 Properties and Change of Materials</b> *(Y5) Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.	<b>Year 5 Forces</b> *(Y5) Identify the effects of air resistance, water resistance and friction that act between moving surfaces (lesson 1).	
<b>Week 7</b>	<b>Year 4 Sound</b> *(Y4) Identify how sounds are made, associating some of them with something vibrating.  *(Y4) Recognise that vibrations from sounds travel through a medium to the ear.  *(Y4) Recognise that sounds get fainter as the distance from the sound source increases.	<b>Year 5 Properties and Change of Materials</b> *(Y5) Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.	<b>Year 5 Forces</b> *(Y5) Identify the effects of air resistance, water resistance and friction that act between moving surfaces (lesson 2).	

<p><b>Week 8</b></p>	<p><b>Year 4 Sound</b>  *(Y4) Find patterns between the pitch of a sound and features of the object that produced it.   *(Y4) Find patterns between the volume of a sound and the strength of the vibrations that produced it.</p>	<p><b>Year 4 Electricity</b>  Identify common appliances that run on electricity.   Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</p>	<p><b>Year 5 Forces</b>  *(Y5) Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p>	<p>written explanations of results, explanations involving causal relationships, and conclusions.</p> <ul style="list-style-type: none"> <li>• Present findings in written form, displays and other presentations.</li> <li>• Use test results to make predictions to set up further comparative and fair tests.</li> <li>• Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments.</li> </ul>
<p><b>Week 9</b></p>	<p><b>Year 5 Earth and Space</b>  Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.   Describe the movement of the Moon relative to the Earth.</p>	<p><b>Year 4 Electricity</b>  Recognise some common conductors and insulators, and associate metals with being good conductors.</p>	<p><b>Year 4 Electricity</b>  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.</p>	
<p><b>Week 10</b></p>	<p><b>Year 5 Earth and Space</b>  *(Y5) 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><b>Year 5 Earth and Space</b>  *(Y5) Describe the Sun, Earth and Moon as approximately spherical bodies.</p>	<p><b>Year 4 Electricity</b>  Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.</p>	

Science Coverage for Year 5/6  
2023 - 2024  
National Curriculum Statements

<u>Scientific Knowledge</u>				<u>Working Scientifically</u>
Autumn Term	Spring Term	Summer Term		
Week 1	<b>Year 5 <i>Living things and their Habitats</i></b> *(Y5) Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.	<b>Year 6 <i>Electricity</i></b> *(Y6) Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.	<b>Year 6 <i>Animals, including Humans</i></b> *(Y6) Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.	
Week 2	<b>Year 5 <i>Living things and their Habitats</i></b> *(Y5) Describe the life process of reproduction in some plants and animals.	<b>Year 6 <i>Electricity</i></b> Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.	<b>Year 6 <i>Animals, including Humans</i></b> Describe the ways in which nutrients and water are transported within animals, including humans.	
Week 3	<b>Year 5 <i>Animals, including Humans</i></b> Describe the changes as humans develop to old age.	<b>Year 6 <i>Living things and their Habitats</i></b> *(Y6) Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals.	<b>Year 5 <i>Properties and Change of Materials</i></b> *(Y5) Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.	

- Plan enquiries, including recognising and controlling variables where necessary.
- Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision.
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models.



<b>Week 4</b>	<b>Year 6 Animals, including Humans</b> *(Y6) Recognise the impact of diet, exercise; drugs and lifestyle on the way their bodies function.	<b>Year 6 Living things and their Habitats</b> Give reasons for classifying plants and animals based on specific characteristics.	<b>Year 5 Properties and Change of Materials</b> *(Y5) 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.	<ul style="list-style-type: none"> <li>• Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.</li> <li>• Present findings in written form, displays and other presentations.</li> <li>• Use test results to make predictions to set up further comparative and fair tests.</li> <li>• Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments.</li> </ul>
<b>Week 5</b>	<b>Year 5 Properties and Change of Materials</b> *(Y5) Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.	<b>Year 5 Properties and Change of Materials</b> *(Y5) Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.	<b>Year 5 Forces</b> *(Y5) Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	
<b>Week 6</b>	<b>Year 5 Properties and Change of Materials</b> *(Y5) Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.	<b>Year 5 Properties and Change of Materials</b> *(Y5) Demonstrate that dissolving, mixing and changes of state are reversible changes.	<b>Year 5 Earth and Space</b> *(Y5) Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.	
<b>Week 7</b>	<b>Year 5 Forces</b> *(Y5) Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.	<b>Year 5 Earth and Space</b> *(Y5) Describe the Sun, Earth and Moon as approximately spherical bodies.	<b>Year 5 Earth and Space</b> Describe the movement of the Moon relative to the Earth.	



<p><b>Week 8</b></p>	<p><b>Year 5 Forces</b> *(Y5) Identify the effects of air resistance, water resistance and friction that act between moving surfaces (lesson 1).</p>	<p><b>Year 5 Earth and Space</b> Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</p>	<p><b>Year 6 Evolution and Inheritance</b> Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.  Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</p>	
<p><b>Week 9</b></p>	<p><b>Year 5 Forces</b> *(Y5) Identify the effects of air resistance, water resistance and friction that act between moving surfaces (lesson 2).</p>	<p><b>Year 6 Evolution and Inheritance</b> *(Y6) 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><b>Year 6 Light</b> *(Y6) 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><b>Week 10</b></p>	<p><b>Year 6 Electricity</b> *(Y6) Use recognised symbols when representing a simple circuit in a diagram.</p>	<p><b>Year 6 Light</b> *(Y6) Recognise that light appears to travel in straight lines.  *(Y6) 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><b>Year 6 Light</b> Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.</p>	