

SCIENCE Curriculum Cycle B

Class 1

Across all year groups scientific knowledge and skills should be learned by working scientifically.

Cycle B					
Marvellous Me	Material World	Frozen	Gardener's World	Hot Places	Buckets and Spades
<p>EYFS: The World Develop an understanding of growth and changes over time</p>	<p>EYFS: The World Talk about why things happen and how things work Know about similarities and differences in relation to objects and materials</p>	<p>EYFS: The World Talk about features of their own immediate environment and how environments may vary from one another Make observations of animals and explain why some things occur, and can talk about changes</p>	<p>EYFS: The World Develop an understanding of growth, decay and changes over time Make observations of plants and explain why some things occur, and can talk about changes</p>	<p>EYFS: The World Talk about features of their own immediate environment and how environments may vary from one another Develop an understanding of changes over time Know about similarities and differences in relation to living things.</p>	<p>EYFS: The World Show care and concern for living things and the environment Make observations of animals and explain why some things occur, and can talk about changes</p>
<p>ANIMALS, INCLUDING HUMANS Y1</p> <ul style="list-style-type: none"> • Know how to name the parts of the human body that can be seen *Know how to link the correct part of the human body to each sense 	<p>EVERYDAY MATERIALS Y1 (Clothing)</p> <ul style="list-style-type: none"> • distinguish between an object and the material from which it is made • identify and name a variety of everyday materials, including fabrics, plastic, glass, wood, metal, water, and rock • describe the simple physical properties of a variety of everyday materials • compare and group together a variety of everyday materials on the basis of their simple physical properties. 	<p>ANIMALS, INCLUDING HUMANS Y1 (Cold Places)</p> <ul style="list-style-type: none"> • Know and name a variety of animals, including fish, amphibians, reptiles, birds and mammals * Classify and know animals by what they eat (carnivore, herbivore and omnivore) *Know how to sort animals into categories (including fish, amphibians, reptiles, birds and mammals) *Know how to sort living and non-living things 	<p>PLANTS Y1 (Local)</p> <ul style="list-style-type: none"> *Know and name a variety of common wild and <u>garden plants</u> *Know and name the petals, stem, leaves and root of a plant *Know and name the roots, trunk, branches and leaves of a tree. <p>ANIMALS: Identify and name a variety of common animals including birds and minibeasts.</p>	<p>PLANTS Y1</p> <ul style="list-style-type: none"> *Identify and name a variety of common wild and garden plants, • identify and describe the basic structure of a variety of common flowering plants, (found in hot places). <p>ANIMALS: •Identify and name a variety of common animals including, amphibians, reptiles, birds and mammals</p>	<p>ANIMALS: Y1 (Sea Life)</p> <ul style="list-style-type: none"> •Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals • identify and name a variety of common animals that are carnivores, herbivores and omnivores *Know how to sort animals into categories (including fish, amphibians, reptiles, birds and mammals) *Know how to sort living and non-living things
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<p>SEASONAL CHANGES: • Observe changes across the four seasons * observe and describe weather associated with the seasons</p>					

SCIENCE Curriculum

Class 2

Across all year groups scientific knowledge and skills should be learned by working scientifically.

Cycle B		
Life in the Cotswolds	London's Burning	Land Ahoy!
<p>ANIMALS, INCLUDING HUMANS Y1</p> <ul style="list-style-type: none"> • Know and name a variety of animals, including fish, amphibians, reptiles, birds and mammals • Classify and know animals by what they eat (carnivore, herbivore and omnivore) • Know how to sort animals into categories including fish, amphibians, reptiles, birds and mammals) • Know how to sort living and non-living things • Know how to name the parts of the human body that can be seen • Know how to link the correct part of the human body to each sense. 	<p>USES OF EVERYDAY MATERIALS Y1</p> <ul style="list-style-type: none"> • Distinguish between an object and the material it is made from • Know the materials that an object is made from • Know the difference between wood, plastic, glass, metal, water and rock • Know about the properties of everyday materials • Group objects based on the materials they are made from. 	<p>PLANTS Y1</p> <ul style="list-style-type: none"> • Know and name a variety of common wild and garden plants • Know and name the petals, stem, leaves and root of a plant • Know and name the roots, trunk, branches and leaves on a tree
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SCIENCE Curriculum

Class 3

Across all year groups scientific knowledge and skills should be learned by working scientifically.

Cycle B		
Stone Age – Iron Age	Gloucestershire	The Romans
<p>ALL LIVING THINGS AND THEIR HABITATS(Y4)</p> <ul style="list-style-type: none"> • Group living things in different ways. • Use classification keys to group, identify and name living things. • Create classification keys to group, identify and name living things. • Know how changes to an environment could endanger living things. <p>ANIMALS INCLUDING HUMANS (Y4)</p> <ul style="list-style-type: none"> • Identify and name parts of the human digestive systems. • Know the functions of the organs in the human digestive system. • Identify and know the different types of teeth in humans. • Use food chains to identify producers, predators and prey. • Construct food chains to identify producers, predators and prey. 	<p>STATES OF MATTER (Y4)</p> <ul style="list-style-type: none"> • Group materials based on their state of matter (solid, liquid and gas). • Know how some materials can change state. • Explore how materials change state. • Measure the temperature at which materials change state. • Know about the water cycle. • Know about the part played by evaporation and condensation in the cycle. <p>SOUND (Y4)</p> <ul style="list-style-type: none"> • Know how sound is made. • Know how sound travels from a source to our ears. • Know how sounds are made, associating some of them with vibrating. • Know the correlation between pitch and the object producing the sound. • Know the correlation between the volume of a sound and the strength of the vibrations that produced it. • Know what happens to a sound as it travels away from its source. 	<p>ELECTRICITY (Y4)</p> <ul style="list-style-type: none"> • Identify and name appliances that require electricity to function. • Construct a series circuit. • Identify and name the components in a series circuit (including cells, wires, bulbs, switches and buzzers). • Know how to draw a circuit diagram. • Predict and test whether a lamp will light within a circuit. • Know the function of a switch in a circuit. • Know the difference between a conductor and an insulator; giving examples of each.
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SCIENCE Curriculum

Class 4

Across all year groups scientific knowledge and skills should be learned by working scientifically.

Cycle B		
<p>Anglo-Saxons</p> <p>ALL LIVING THINGS AND THEIR HABITATS(Y4)</p> <ul style="list-style-type: none"> • Group living things in different ways. • Use classification keys to group, identify and name living things. • Create classification keys to group, identify and name living things. • Know how changes to an environment could endanger living things. <p>ANIMALS INCLUDING HUMANS (Y4)</p> <ul style="list-style-type: none"> • Identify and name parts of the human digestive systems. • Know the functions of the organs in the human digestive system. • Identify and know the different types of teeth in humans. • Use food chains to identify producers, predators and prey. • Construct food chains to identify producers, predators and prey. 	<p>European Study</p> <p>SOUND (Y4)</p> <ul style="list-style-type: none"> • Know how sound is made. • Know how sound travels from a source to our ears. • Know how sounds are made, associating some of them with vibrating. • Know the correlation between pitch and the object producing the sound. • Know the correlation between the volume of a sound and the strength of the vibrations that produced it. • Know what happens to a sound as it travels away from its source. <p>STATES OF MATTER (Y4)</p> <ul style="list-style-type: none"> • Group materials based on their state of matter (solid, liquid and gas). • Know how some materials can change state. • Explore how materials change state. • Measure the temperature at which materials change state. • Know about the water cycle. • Know about the part played by evaporation and condensation in the cycle. 	<p>The Romans</p> <p>ELECTRICITY (Y4)</p> <ul style="list-style-type: none"> • Identify and name appliances that require electricity to function. • Construct a series circuit. • Identify and name the components in a series circuit (including cells, wires, bulbs, switches and buzzers). • Know how to draw a circuit diagram. • Predict and test whether a lamp will light within a circuit. • Know the function of a switch in a circuit. • Know the difference between a conductor and an insulator; giving examples of each.
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Science Curriculum

Class 5

Across all year groups scientific knowledge and skills should be learned by working scientifically.

Cycle B		
WWII	Vikings	Rivers
<p>ELECTRICITY (Y6)</p> <ul style="list-style-type: none"> • Know how the number & voltage of cells in a circuit link to the brightness of a lamp or the volume of a buzzer. • Compare and give reasons for why components work and do not work in a circuit. • Draw circuit diagrams using correct symbols. <p>LIGHT (Y6)</p> <ul style="list-style-type: none"> • Know how light travels. • Know and demonstrate how we see objects. • Know why shadows have the same shape as the objects that cast them. • Know how simple optical instruments work e.g. periscope, telescope, binoculars, mirror, magnifying glass etc. 	<p>ALL LIVING THINGS AND THEIR HABITATS (Y6)</p> <ul style="list-style-type: none"> • Classify living things into broad groups according to observable characteristics and based on similarities and differences. • Know how living things have been classified. • Give reasons for classifying plants and animals in a specific way. <p>ANIMALS, INCLUDING HUMANS (Y6)</p> <ul style="list-style-type: none"> • Identify and name the main parts of the human circulatory System. • Know and describe the functions of the heart, blood vessels and blood. • Recognise the impact of diet, exercise, drugs and lifestyle on health. • Know the ways in which nutrients and water are transported within animals, including humans. 	<p>EVOLUTION AND INHERITANCE (Y6)</p> <ul style="list-style-type: none"> • Know that Earth and living things have changed over time. • Know how fossils can be used to find out about the past. • Know about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents). • Know how animals and plants are adapted to suit their environment. • Link adaptation over time to evolution. • Know about evolution and can explain what it is. <p><i>(Link to Sex and Relationships Education)</i></p>
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