



	<u>Autumn</u>		<u>Spring</u>		<u>Summer</u>
Curious Caterpillars	My body and exploring materials.		Explore and respond to natural phenomena. Pets & animals around me.		The outdoors. Nature in my garden.
Blossoming Butterflies	Seasonal change. Using senses to explore.		Change of growing animals. Farmyard animals.		Caring for growing plants. Explore collections of materials.
Reception	Explore the natural world, light and dark, habitats & animals.		Effect of changing seasons. Animals around the world.		Growth and change. Looking after our environment.
Year 1	<u>Unit:</u> Seasonal Changes <u>Concept:</u> Physics	<u>Unit:</u> Everyday Materials <u>Concept:</u> Chemistry	<u>Unit:</u> Animals Inc Humans <u>Concept:</u> Biology <u>Unit:</u> Seasonal Change <u>Concept:</u> Physics	<u>Unit:</u> Animals, Inc Humans <u>Concept:</u> Biology	<u>Unit:</u> Plants <u>Concept:</u> Biology
Year 2	<u>Unit:</u> Use of Materials <u>Concept:</u> Chemistry	<u>Working Scientifically:</u> <u>Concept:</u> Chemistry	<u>Unit:</u> Living Things & Habitats <u>Concept:</u> Biology	<u>Unit:</u> Plants <u>Concept:</u> Biology	<u>Unit:</u> Animals Inc. Humans <u>Concept:</u> Biology
Year 3	<u>Unit:</u> Animals Inc. Humans <u>Concept:</u> Biology	<u>Unit:</u> Rocks <u>Concept:</u> Chemistry	<u>Unit:</u> Plants <u>Concept:</u> Biology	<u>Unit:</u> Light <u>Concept:</u> Physics	<u>Unit:</u> Forces & Magnets <u>Concept:</u> Physics
Year 4	<u>Unit:</u> Animals Inc Humans <u>Concept:</u> Biology	<u>Unit:</u> Sound <u>Concept:</u> Physics	<u>Unit:</u> Electricity <u>Concept:</u> Physics	<u>Unit:</u> States of Matter <u>Concept:</u> Chemistry	<u>Unit:</u> Living Things & Habitats <u>Concept:</u> Biology
Year 5	<u>Unit:</u> Forces <u>Concept:</u> Physics	<u>Unit:</u> Properties & Changes of Materials <u>Concept:</u> Chemistry	<u>Unit:</u> Animals Inc Humans <u>Concept:</u> Biology	<u>Unit:</u> Living Things & Habitats <u>Concept:</u> Biology	<u>Unit:</u> Earth & Space <u>Concept:</u> Physics
Year 6	<u>Unit:</u> Electricity <u>Concept:</u> Physics	<u>Unit:</u> Animals Inc. Humans <u>Concept:</u> Biology	<u>Unit:</u> Living Things & Habitats <u>Concept:</u> Biology	<u>Unit:</u> Evolution & Inheritance <u>Concept:</u> Biology	<u>Unit:</u> Light <u>Concept:</u> Physics



Detailed SCIENCE CURRICULUM OVERVIEW

EYFS				
Using development matters statements				
	Unit	Curious Caterpillars (2-3 yrs)	Blossoming Butterflies (3-4 yrs)	Reception
Autumn	Me, Myself and I	<ul style="list-style-type: none"> Repeat actions that have an effect. Explore materials with different properties Notice differences between people. Explore natural materials, indoors and outside. Make connections between the features of their family and other families. Explore and respond to different natural phenomena in their setting and on trips. 	<ul style="list-style-type: none"> Use all their senses in hands-on exploration of natural materials. Understand the key features of the life cycle of a plant and an animal. Talk about the differences between materials and changes they notice. Begin to understand the need to respect and care for the natural environment and all living things. Understand the key features of the life cycle of a plant and an animal. Plant seeds and care for growing plants. Explore and talk about different forces they can feel. Explore collections of materials with similar and/or different properties. 	<ul style="list-style-type: none"> Explore the natural world around them. Understand the effect of changing seasons on the natural world around them. Describe what they see, hear and feel whilst outside. Recognise some environments that are different to the one in which they live. Recognise some similarities and differences between life in this country and life in other countries.
	Bright Lights & Dark Nights			
Spring	Once Upon A Time...			
	Amazing Animals			
Summer	The World Around Us			
	Little People, Big Adventures			



YEAR 1

	Unit	Concept	Curriculum Objectives	Working Scientifically
Autumn 1	Seasonal Change	Physics	<ul style="list-style-type: none"> • Observe changes across the four seasons • Observe & describe weather associated with seasons & how day length varies • 	<ul style="list-style-type: none"> • Observe Changes Over Time • Pattern Seeking
Autumn 2	Everyday Materials	Chemistry	<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 wood, plastic, glass, metal, water, and rock • Describe the simple physical properties of a variety of everyday materials • Compare & group a variety of everyday materials from simple properties. 	<ul style="list-style-type: none"> • Identifying, Grouping and Classifying
Spring 1	Animals Inc Humans	Biology	<ul style="list-style-type: none"> • Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense 	<ul style="list-style-type: none"> • Identifying, Grouping and Classifying •
	Seasonal Change	Physics	<ul style="list-style-type: none"> • Observe changes across the four seasons • Observe & describe weather associated with seasons & how day length varies 	<ul style="list-style-type: none"> • Observe Changes Over Time • Pattern Seeking
Spring 2	Animals Inc Humans	Biology	<ul style="list-style-type: none"> • Identify and name a variety of common animals including: fish, amphibians, reptiles, birds and mammals • Identify & name a variety of carnivores, herbivores & omnivores • Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) 	<ul style="list-style-type: none"> • Identifying, Grouping and Classifying
Summer	Plants	Biology	<ul style="list-style-type: none"> • Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees • Identify and describe the basic structure of a variety of common flowering plants, including trees. 	<ul style="list-style-type: none"> • Identifying, Grouping and Classifying • Pattern Seeking



YEAR 2

	Unit	Concept	Curriculum Objectives	Working Scientifically
Autumn 1	Uses of Everyday Materials	Chemistry	<ul 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. 	<ul style="list-style-type: none"> Identifying, Grouping and Classifying Pattern Seeking
Autumn 2	<u>WS Focus</u> Materials Exploration.	Working Scientifically	<ul style="list-style-type: none"> Asking simple questions and recognising that they can be answered in different ways Observing closely, using simple equipment Performing simple tests Using their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions 	<ul style="list-style-type: none"> Fair Testing Observe Changes Over Time
Spring 1	Living Things & Their Habitats	Biology	<ul style="list-style-type: none"> Explore and compare the differences between things that are living, dead, and things that have never been alive 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 Identify & name a variety of plants and animals in their habitats, inc. microhabitats 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. 	<ul style="list-style-type: none"> Identifying, Grouping and Classifying Pattern Seeking
Spring 2	Plants	Biology	<ul style="list-style-type: none"> Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy 	<ul style="list-style-type: none"> Fair Testing Observe Changes Over Time
Summer	Animals Inc Humans	Biology	<ul style="list-style-type: none"> Notice that animals, including humans, have offspring which grow into adults Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene 	<ul style="list-style-type: none"> Observe Changes Over Time Research



YEAR 3

	Unit	Concept	Curriculum Objectives	Working Scientifically
Autumn 1	Animals Inc Humans	Biology	<ul style="list-style-type: none"> Identify that humans and some other animals have skeletons and muscles for support, protection, and movement Identify that animals, inc. humans, need the right types and amount of nutrition & they cannot make their own food, they get nutrition from what they eat. 	<ul style="list-style-type: none"> Identifying, Grouping and Classifying Research
Autumn 2	Rocks	Chemistry	<ul style="list-style-type: none"> Compare and group together different kinds of rocks on their appearance & simple properties Describe in simple terms how fossils are formed when things that have lived are trapped within rock Recognise that soils are made from rocks and organic matter. 	<ul style="list-style-type: none"> Identifying, Grouping and Classifying Fair Testing
Spring 1	Plants	Biology	<ul style="list-style-type: none"> Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers 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 Investigate the way in which water is transported within plants Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. 	<ul style="list-style-type: none"> Fair Testing Observe Changes Over Time
Spring 2	Light	Physics	<ul style="list-style-type: none"> Recognise that we need light in order to see & that dark is the absence of light Notice that light is reflected from surfaces Recognise that light from the sun can be dangerous & how to protect their eyes Recognise that shadows are formed when the light from a light source is blocked by an opaque object Find patterns in the way that the size of shadows change. 	<ul style="list-style-type: none"> Pattern Seeking Identifying, Grouping and Classifying
Summer	Forces & Magnets	Physics	<ul style="list-style-type: none"> Compare how things move on different surfaces Notice that some forces need contact between objects, but magnetic forces can act at a distance Observe how magnets attract/repel each other Compare and group together a variety of everyday materials on whether they are attracted to a magnet and identify some magnetic materials. Describe magnets as having two poles and predict whether two magnets will attract or repel each other, depending on which poles are facing. 	<ul style="list-style-type: none"> Identifying, Grouping and Classifying Fair Testing



YEAR 4

	Unit	Concept	Curriculum Objectives	Working Scientifically
Autumn 1	Animals Inc Humans	Biology	<ul style="list-style-type: none">Describe the simple functions of the basic parts of the digestive system in humansIdentify the different types of teeth in humans and their simple functionsConstruct and interpret a variety of food chains, identifying producers, predators, and prey.	<ul style="list-style-type: none">Pattern SeekingResearch
Autumn 2	Sound	Physics	<ul style="list-style-type: none">Identify how sounds are made, associating some of them with something vibrating.Recognise that vibrations from sounds travel through a medium to the ear.Find patterns between:<ol style="list-style-type: none">the pitch of a sound and features of the object that produced it.the volume of a sound & the strength of the vibrations that produced it.Recognise that sounds get fainter as the distance from the sound source increases	<ul style="list-style-type: none">Pattern SeekingFair Testing
Spring 1	Electricity	Physics	<ul style="list-style-type: none">Identify common appliances that run on electricityConstruct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzersIdentify whether a lamp will light, based on whether or not the lamp is part of a complete loop with a battery.Recognise that a switch opens and closes a circuit.Recognise some common conductors and insulators & associate metals with being good conductors.	<ul style="list-style-type: none">Pattern SeekingIdentifying, Grouping and Classifying
Spring 2	States of Matter	Chemistry	<ul style="list-style-type: none">Compare & group materials together, according to if they are a solid, liquid or gas .Observe that some materials change state when they are heated or cooled, & measure/research the temperature at which this happens in degrees Celsius (°C)Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	<ul style="list-style-type: none">Observe Changes Over TimeIdentifying, Grouping and Classifying
Summer	Living Things & Their Habitats	Biology	<ul style="list-style-type: none">Recognise that living things can be grouped in a variety of ways.Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.Recognise that environments can change and that this can sometimes pose dangers to living things.	<ul style="list-style-type: none">Identifying, grouping and classifying.Research



YEAR 5

	Unit	Concept	Curriculum Objectives	Working Scientifically
Autumn 1	Forces	Physics	<ul style="list-style-type: none"> Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object Identify the effects of air resistance, water resistance and friction, that act between moving surfaces Recognise that some mechanisms, including levers, pulleys, and gears, allow a smaller force to have a greater effect. 	<ul style="list-style-type: none"> Fair Testing
Autumn 2	Properties & Changes of Materials	Chemistry	<ul style="list-style-type: none"> Compare & group together everyday materials based on their properties: solubility, transparency, conductivity (electrical & thermal) & magnetic response. Know that some materials will dissolve in liquid to form a solution & how to recover it. Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. Give reasons, based on evidence from comparative and fair tests, for the uses of everyday materials, including metals, wood and plastic. Demonstrate that dissolving, mixing and changes of state are reversible changes. Explain that some changes result in the formation of new materials, & that this kind of change is not usually reversible, inc changes associated with burning and acid on bicarbonate of soda. 	<ul style="list-style-type: none"> Identifying, Grouping and Classifying Fair Testing
Spring 1	Animals Inc Humans	Biology	<ul style="list-style-type: none"> Describe the changes as humans develop to old age. 	<ul style="list-style-type: none"> Pattern Seeking Research
Spring 2	Living Things & Their Habitats	Biology	<ul style="list-style-type: none"> Describe the differences in the life cycles of: mammal, an amphibian, an insect, and a bird Describe the life process of reproduction in some plants and animals. 	<ul style="list-style-type: none"> Observe Changes Over Time Fair Testing
Summer	Earth & Space	Physics	<ul style="list-style-type: none"> Describe the movement of the Earth, & other planets, relative to the Sun. Describe the movement of the Moon relative to the Earth. Describe the Sun, Earth, and Moon as approximately spherical bodies. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. 	<ul style="list-style-type: none"> Pattern Seeking Research



YEAR 6

	Unit	Concept	Curriculum Objectives	Working Scientifically
Autumn 1	Electricity	Physics	<ul style="list-style-type: none">• Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit• 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• Use recognised symbols when representing a simple circuit in a diagram.	<ul style="list-style-type: none">• Fair Testing• Pattern Seeking
Autumn 2	Animals In Humans	Biology	<ul style="list-style-type: none">• Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood• Describe the ways in which nutrients and water are transported within animals, including humans.• Recognise the impact of diet, exercise, drugs and lifestyle on the way the body functions.	<ul style="list-style-type: none">• Fair Testing• Research
Spring 1	Living Things & Their Habitats	Biology	<ul 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 animals based on specific characteristics.	<ul style="list-style-type: none">• Identifying, Grouping and Classifying• Research
Spring 2	Evolution & Inheritance	Biology	<ul style="list-style-type: none">• Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.• Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.• Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.	<ul style="list-style-type: none">• Research
Summer	Light	Physics	<ul style="list-style-type: none">• Recognise that light appears to travel in straight lines and use it to explain that objects are seen because they give out or reflect light into the eye.• Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes• Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	<ul style="list-style-type: none">• Fair Testing