

Year Group	Autumn Term	Spring Term	Summer Term
EYFS	Autumn A - Cycle A - My senses Autumn A – Cycle B - Parts of my body and Which material is best for...?	Spring A - Cycle A - Opposites *Hot and cold, *Light and dark, *Frozen and melted Spring A – Cycle B = Growing plants - lifecycles	Summer A - Cycle A - Pushes and pulls/ making things move Summer A - Cycle B - What can my body do? Looking after myself and keeping healthy, Skeletons and bones.
	Autumn B – Cycle A - Materials (building a house) Autumn B – Cycle B – Pushes and pulls - magnetism	Spring B - Cycle A Lifecycles of animals and habitats Spring B – Cycle B - Baby animals and change	Summer B - Cycle A - Minibeast lifecycles and habitats Summer B - Cycle B- Floating and sinking
Year 1	<u>Seasonal Changes</u> To observe changes across the four seasons. To observe and describe weather associated with the seasons and how the day length varies. <u>Suggested Vocabulary</u> Summer, Spring, Autumn, winter, sun, day, moon, night, light. <u>Working scientifically objectives</u> <ul style="list-style-type: none"> Asking simple questions . Observing closely, using simple equipment . 	<u>Seasonal Changes</u>	<u>Seasonal Changes</u>
	<u>Plants- trees</u> To identify and name a variety of common plants, including garden plants, wild plants and trees, and those classified as deciduous and evergreen. <u>Suggested Vocabulary</u> Deciduous, evergreen, leaves, flowers, roots, branch, <u>Working Scientifically Objectives</u> <ul style="list-style-type: none"> asking simple questions observing closely, using simple equipment . identifying and classifying using their observations and ideas to suggest answers to questions 		<u>Plants - flowers</u> To identify and describe the basic structure of a variety of common flowering plants, including roots, stem/trunk, leaves and flowers. <u>Suggested Vocabulary</u> Leaves, flowers, roots, bulbs, seed, branch, stem <u>Working Scientifically Objectives</u> <ul style="list-style-type: none"> asking simple questions observing closely, using simple equipment . identifying and classifying using their observations and ideas to suggest answers to questions
	<u>Animals Including Humans</u> To identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates To identify and name a variety of common animals that are carnivores, herbivores and omnivores To describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles, mammals and invertebrates, and including pets) To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. <u>Suggested Vocabulary</u> Fish, reptiles, mammals, birds, amphibians, herbivore, carnivore, omnivore, beak <u>Working scientifically objectives</u>		

	<ul style="list-style-type: none"> asking simple questions observing closely, using simple equipment . identifying and classifying using their observations and ideas to suggest answers to questions 		
		<p><u>Everyday Materials</u></p> <p>To distinguish between an object and the material from which it is made</p> <p>To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> <p>To describe the simple physical properties of a variety of everyday materials</p> <p>To compare and group together a variety of everyday materials on the basis of their simple physical properties</p> <p>To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p><u>Suggested Vocabulary</u> plastic, smooth, rough, bendy, soft, metal, rock paper, glass.</p> <p><u>Working scientifically objectives</u></p> <ul style="list-style-type: none"> asking simple questions . observing closely, using simple equipment . performing simple tests 	
Year Group	Autumn Term	Spring Term	Summer Term
Year 2	<p><u>Autumn A - Animals including humans</u> To notice that animals, including humans, have offspring which grow into adults</p> <p>To find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>To describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p><u>Suggested Vocabulary</u> survival, adult, baby, offspring, hygiene, exercise, kitten, calf, puppy</p> <p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> asking simple questions using their observations and ideas to suggest answers to questions <p><u>Autumn B Living Things and their Habitat</u></p> <p>To explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>To 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>To identify and name a variety of plants and animals in their habitats, including micro-habitats</p>	<p><u>Materials</u></p> <p>To identify and compare the uses of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock, and paper/cardboard.</p> <p>To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p><u>Suggested Vocabulary</u> materials, natural, man-made, smooth, bendy, magnetic, non-magnetic</p> <p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> asking simple questions observing closely, using simple equipment performing simple tests gathering and recording data to help in answering questions 	<p><u>Plants</u></p> <p>To observe and describe how seeds and bulbs grow into mature plants</p> <p>To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p><u>Suggested Vocabulary</u> Seeds, bulbs, water, light, temperature, growth</p> <p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> asking simple questions observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions

	<p>To 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><u>Suggested Vocabulary</u> Habitat, energy, food chain, predator, prey, woodland, pond, desert, living/dead</p> <p><u>Working scientifically objectives</u></p> <ul style="list-style-type: none"> • asking simple questions • identifying and classifying • using their observations and ideas to suggest answers to questions 		
Year Group	Autumn Term	Spring Term	Summer Term
Year 3	<p><u>Autumn A – Forces and Magnets</u> To notice that some forces need contact between two objects and some forces act at a distance</p> <p>To observe how magnets attract or repel each other and attract some materials and not others</p> <p>To 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>To describe magnets as having two poles.</p> <p>To predict whether two magnets will attract or repel each other, depending on which poles are facing.</p> <p>To compare how things move on different surfaces.</p> <p><u>Suggested Vocabulary</u> Magnetic, force, contact, attract, repel, friction, poles, push, pull</p> <p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> • Asking relevant questions. • Setting up simple practical enquiries, comparative and fair tests. • Making accurate measurements using standard units, using a range of equipment, for example thermometers and data loggers. • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. • Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. 	<p><u>Spring A – Rocks</u> To compare and group together different kinds of rocks on the basis of their simple physical properties</p> <p>To relate the simple physical properties of some rocks to their formation (igneous or sedimentary)</p> <p>To describe in simple terms how fossils are formed when things that have lived are trapped within sedimentary rock.</p> <p><u>Suggested Vocabulary</u> Fossils, soil, sandstone, granite, marble, pumice, crystals, absorbent sedimentary</p> <p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> • Asking relevant questions. • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. • Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. 	<p><u>Summer A and B - Plants</u> To identify and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers.</p> <p>To 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.</p> <p>To investigate the way in which water is transported within plants.</p> <p>To explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> <p><u>Suggested Vocabulary</u> Flower, pollination, dispersal, transportation, reproduction, soil, nutrients Water, lights.</p> <p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> • Asking relevant questions. • Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables.
	<p><u>Autumn B – Animals Including Humans</u></p> <p>To 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>To identify that humans and some animals have skeletons and muscles for support, protection and movement.</p> <p><u>Suggested Vocabulary</u> Movement, muscles, bones, skeleton, nutrition, carbohydrates, dairy, fats, sugars</p> <p><u>Working Scientifically Objectives</u></p>	<p><u>Spring B – Light</u> To recognise that they need light in order to see things and that dark is the absence of light.</p> <p>To recognise that light from the sun can be dangerous and that there are ways to protect their eyes.</p> <p>To observe and name a variety of sources of light, including electric lights, flames and the Sun, explaining that we see things because light travels from them to our eyes</p> <p>To notice that light is reflected from surfaces</p>	

	<ul style="list-style-type: none"> Asking relevant questions. Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. 	<p>To associate shadows with a light source being blocked by something; find patterns that determine the size of shadows.</p> <p><u>Suggested Vocabulary</u> Light, shadows, mirror, reflective, dark, reflection</p> <p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> Asking relevant questions. Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. 	
Year Group	Autumn Term	Spring Term	Summer Term
Year 4	<p><u>Autumn A – States of Matter</u> To compare and group materials together, according to whether they are solids, liquids or gases</p> <p>To observe that some materials change state when they are heated or cooled, and measure the temperature at which this happens in degrees Celsius (°C), building on their teaching in mathematics</p> <p>To identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p> <p><u>Suggested Vocabulary</u> Solid, liquid, gas, evaporation, condensation, particles, temperature, freezing, melting</p> <p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Using results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests. Identifying differences, similarities or changes related to simple scientific ideas and processes. 	<p><u>Spring A - Animals Including Humans</u></p> <p>To describe the simple functions of the basic parts of the digestive system in humans</p> <p>To identify the different types of teeth in humans and their simple functions.</p> <p>To construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p><u>Suggested Vocabulary</u> oesophagus , small intestine, large intestine, herbivore, carnivore, canine, incisor, molar, teeth</p> <p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Using results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests. Identifying differences, similarities or changes related to simple scientific ideas and processes. Using straight forward scientific evidence to answer questions or to support their findings. 	<p><u>Summer A and B – Living things and their Habitats</u></p> <p>To identify and name a variety of living things (plants and animals) in the local and wider environment, using classification keys to assign them to groups</p> <p>To give reasons for classifying plants and animals based on specific characteristics</p> <p>To recognise that environments are constantly changing and that this can sometimes pose dangers to specific habitats.</p> <p><u>Suggested Vocabulary</u> Vertebrates, amphibians, reptiles, birds, mammals, environment, habitats</p> <p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Using results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests. Identifying differences, similarities or changes related to simple scientific ideas and processes. Using straight forward scientific evidence to answer questions or to support their findings.
	<p><u>Autumn B – Sound</u></p> <p>To observe and name a variety of sources of sound, noticing that we hear with our ears</p> <p>To identify how sounds are made, associating some of them with something vibrating</p> <p>To recognise that sounds get fainter as the distance from the sound source increases</p> <p>To find patterns between the pitch of a sound and features of the object that produced it</p> <p>To find patterns between the volume of a sound and the strength of the vibrations that produced it.</p> <p><u>Suggested Vocabulary</u> Volume, vibration, wave, pitch, tone, speaker</p>	<p><u>Spring B and Summer A – Electricity</u></p> <p>To identify common appliances that run on electricity</p> <p>To construct a simple series electrical circuit</p> <p>To 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>To 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> <p>To recognise some common conductors and insulators, and associate metals with being good conductors.</p> <p><u>Suggested Vocabulary</u> Cells, buzzers, bulbs, switch, battery, circuit, series, conductors, insulators</p>	

	<p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Identifying differences, similarities or changes related to simple scientific ideas and processes Using straight forward scientific evidence to answer questions or to support their findings. 	<p><u>Working Scientifically Objectives</u></p> <ul style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Identifying differences, similarities or changes related to simple scientific ideas and processes Using straight forward scientific evidence to answer questions or to support their findings. 	
Year Group	Autumn Term	Spring Term	Summer Term
Year 5	<p><u>Autumn A And Part of Autumn B - Earth and Space</u></p> <p>To describe the movement of the Earth relative to the Sun in the solar system To describe the movement of the Moon relative to the Earth To describe the Sun, Earth and Moon as approximately spherical bodies To use the idea of the Earth's rotation to explain day and night.</p> <p><u>Suggested Vocabulary</u> light source, shadow, axis, orbit, sphere, rotate, stars, constellations, phases of the moon</p> <p><u>Working scientifically objectives</u></p> <ul style="list-style-type: none"> Presenting findings in written form, displays and other presentations 	<p><u>Continue from Autumn B</u></p> <p><u>Part of Spring A and Spring B – Changes in Materials</u></p> <p>To compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets.</p> <p>To give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</p> <p>To know how some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</p> <p>To use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</p> <p>To demonstrate that dissolving, mixing and changes of state are reversible changes.</p> <p>To explain that some changes result in the formation of new materials and that this kind of change is usually not reversible, including changes associated with burning and the actions of acid and bicarbonate of soda</p> <p><u>Suggested Vocabulary</u> Evaporate, condense, dissolving, magnetic, filter, gas, conductivity transparency, solubility.</p> <p><u>Working scientifically objectives</u></p> <ul style="list-style-type: none"> Planning enquiries, including recognising and controlling variables where necessary Taking measurements, using a range of scientific equipment, with increasing accuracy and precision Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models 	<p><u>Summer A – Animals Including Humans</u></p> <p>To describe the changes as humans develop to old age.</p> <p><u>Suggested Vocabulary</u> Foetus, embryo, womb, gestation, development, puberty, teenagers, elderly, growth.</p> <p><u>Working scientifically objectives</u></p> <ul style="list-style-type: none"> Presenting findings in written form, displays and other presentations <p><u>Summer B Living Things and their Habitats</u></p> <p>To describe the life cycles common to a variety of animals, including humans (birth, growth, development, reproduction, death), and to a variety of plants (growth, reproduction and death).</p> <p>To describe the life process of reproduction in some plants and animals.</p> <p><u>Suggested Vocabulary</u> Reproduce, stamen, stigma, sepal, petal, ovary, pollen, style germinate.</p> <p><u>Working scientifically objectives</u></p> <ul style="list-style-type: none"> Presenting findings in written form, displays and other presentations

Year Group	Autumn Term	Spring Term	Summer Term
Year 6	<p><u>Autumn A – Forces</u> To explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>To identify the effects of air resistance, water resistance and friction that act between moving surfaces.</p> <p>To recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p><u>Suggested Vocabulary</u> air resistance, water resistance, streamline, pulley, gear, lever, newton, friction, gravity</p> <p><u>Working scientifically objectives</u></p> <ul style="list-style-type: none"> • Planning enquiries, including recognising and controlling variables where necessary • Taking measurements, using a range of scientific equipment, with increasing accuracy and precision • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models • Presenting findings in written form, displays and other presentations • Using test results to make predictions to set up further comparative and fair tests • Using simple models to describe scientific ideas 	<p><u>Spring A – Animals Including Humans</u> To identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p> <p>To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>To describe the ways in which nutrients and water are transported within animals, including humans.</p> <p><u>Suggested Vocabulary</u> Circulatory, vessels, veins, arteries, oxygenated, deoxygenated, valve Exercise, respiration.</p> <p><u>Working scientifically objectives</u></p> <ul style="list-style-type: none"> • Presenting findings in written form, displays and other presentations 	<p><u>Summer A Evolution and Inheritance</u></p> <p>To recognise that living things have changes over time and that fossils provide information about living things that inhabited the Earth millions of years ago</p> <p>To recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p> <p><u>Suggested Vocabulary</u> Genetics, reproduction, characteristics, evolution, adaptation, fossils, inheritance</p> <p><u>Working scientifically objectives</u></p> <ul style="list-style-type: none"> • Presenting findings in written form, displays and other presentations
	<p><u>Autumn B – Electricity</u></p> <p>To use recognised symbols when representing a simple circuit in a diagram.</p> <p>To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</p> <p>To 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><u>Suggested Vocabulary</u> circuit, component, conductor, insulator, symbol, voltage, electricity</p> <p><u>Working scientifically objectives</u></p> <ul style="list-style-type: none"> • Presenting findings in written form, displays and other presentations • Using simple models to describe scientific ideas 	<p><u>Spring B – Living Things and their Habitats</u></p> <p>To describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.</p> <p>To give reasons for classifying plants and animals based on specific characteristics.</p> <p><u>Suggested Vocabulary</u> Classification, Vertebrates, Invertebrates, Micro-organisms, Amphibians, Reptiles, Mammals, Insects</p> <p><u>Working scientifically objectives</u></p> <ul style="list-style-type: none"> • Presenting findings in written form, displays and other presentations 	