

Science		Autumn	Spring	Summer
Reception		Farming- What are the tractors doing? Farmer Duck- Martin Waddell <ul style="list-style-type: none"> • Weather and seasons, • changes in the world around us, • growing crops/harvest time, 	Space- Is the moon made of cheese? Whatever Next!- Jill Murphy <ul style="list-style-type: none"> • The planets, the moon, the sun and stars, • space travel and discovery, Minibeasts- Which creatures are in our garden? The Very Hungry Caterpillar- Eric Carle <ul style="list-style-type: none"> • Minibeast hunting, • naming, describing, • life cycles, 	In the Garden- How do plants grow? Jack and the Beanstalk- Nick Sharratt <ul style="list-style-type: none"> • Growing plants, • how do they grow well, • simple naming of plant species, • parts of a plant, Zoo- What is your favourite animal? This Zoo is Not for You- Ross Collins <ul style="list-style-type: none"> • Naming different animals, • animal features, • habitats,
Year 1 & 2	Year A	All About Me <u>Animals include Humans</u> Human body, senses Know the name of parts of the human body that can be seen Know the basic stages in a life cycle for animals, including humans Toys <u>Everyday materials and their properties</u> Use of materials and their properties Know about the properties of everyday materials Know the name of the materials an object is made from Know why a material might or might not be used for a specific job Know how materials can be changed by squashing, bending, twisting and stretching	Trains, Planes and Automobiles <u>Everyday materials and their properties</u> The suitability of materials for their use. Describing properties Know the name of the materials an object is made from Know about the properties of everyday materials Know why a material might or might not be used for a specific job Know how materials can be changed by squashing, bending, twisting and stretching Rainforests <u>Plants</u> structure of flowering plants Know and name the petals, stem, leaves and root of a plant Know and name the roots, trunk, branches and leaves of a tree Know and explain how seeds and bulbs grow into plants	Medicine <u>Animals including Humans</u> Exercise food and hygiene Name some different sources of food for animals Know why exercise, a balanced diet and good hygiene are important for humans Zoo <u>Animals including Humans</u> reptiles, fish amphibians, birds, mammals, carnivores, herbivores, omnivores, life cycles and offspring. Know how to classify a range of animals by amphibian, reptile, mammal, fish and birds Know and classify animals by what they eat (carnivore, herbivore and omnivore) Know how to sort by living and non living things Classify things by living, dead or never lived Match living things to their habitat Know the basic stages in a life cycle for animals, including humans Olympics

			<p>Know what plants need in order to grow and stay healthy (water, light and suitable temperature)</p> <p><u>Animals including humans</u> Identify and name animals, carnivores, herbivores and omnivores, basic needs</p> <p>Know how to classify a range of animals by amphibian, reptile, mammal, fish and birds</p> <p>Know and classify animals by what they eat (carnivore, herbivore and omnivore)</p> <p>Classify things by living, dead or never lived</p> <p><u>Living things and their habitats</u> simple food chains</p> <p>Know how a specific habitat provides for the basic needs of things living there (plants and animals)</p> <p>Match living things to their habitat</p> <p>Name some different sources of food for animals</p> <p>Know about and explain a simple food chain</p>	<p><u>Animals including humans</u> body parts, exercise, importance of food</p> <p>Know the name of parts of the human body that can be seen</p> <p>Name some different sources of food for animals</p> <p>Know why exercise, a balanced diet and good hygiene are important for humans</p>
	Year B	<p>Farming</p> <p><u>Plants</u> identifying and naming, basic structure, plant requirements</p> <p>Know and name the petals, stem, leaves and root of a plant</p> <p>Know and name the roots, trunk, branches and leaves of a tree</p> <p>Know and explain how seeds and bulbs grow into plants</p> <p>Know what plants need in order to grow and stay healthy (water, light and suitable temperature)</p> <p><u>Living things and their habitats</u> suitability for plant growth</p> <p>Know how a specific habitat provides for the basic needs of things living there (plants and animals)</p>	<p>Mini-beasts</p> <p><u>Animals including Humans</u> Naming identifying, comparing</p> <p>Know how to sort by living and non living things</p> <p>Classify things by living, dead or never lived</p> <p>Know the basic stages in a life cycle for animals, including humans</p> <p><u>Living things in their habitats</u> Micro-habitats</p> <p>Know how a specific habitat provides for the basic needs of things living there (plants and animals)</p> <p>Match living things to their habitat</p> <p>Name some different sources of food for animals</p> <p>Know about and explain a simple food chain</p>	<p>In the Garden</p> <p><u>Plants</u> Identify, name, structure, how things grow</p> <p>Know and name a variety of common wild and garden plants</p> <p>Know and name the petals, stem, leaves and root of a plant</p> <p>Know how a specific habitat provides for the basic needs of things living there (plants and animals)</p> <p>Know and explain how seeds and bulbs grow into plants</p> <p>Know what plants need in order to grow and stay healthy (water, light and suitable temperature)</p>

		<p>Name some different sources of food for animals</p> <p>Design <u>Everyday materials and their properties</u> name materials describe properties Know the name of the materials an object is made from Know about the properties of everyday materials <u>Uses of everyday materials</u> compare, suitability Know why a material might or might not be used for a specific job Know how materials can be changed by squashing, bending, twisting and stretching</p> <p>Space <u>Uses of everyday materials</u> Suitability and changing materials Know why a material might or might not be used for a specific job Know how materials can be changed by squashing, bending, twisting and stretching</p>	<p>Changes <u>Seasonal changes</u> weather, day and night, seasons Name the seasons and know about the type of weather in each season</p>	
Year 3 & 4	Year A	<p>All About Me <u>Animals include Humans</u> Skeletons and muscles, Digestive system, teeth Know about the importance of a nutritious, balanced diet Know how nutrients, water and oxygen are transported within animals and humans Know about the skeletal and muscular system of a human Identify and name the parts of the human digestive system</p>	<p>Trains, Planes and Automobiles <u>Electricity</u> Circuits, switches, conductors, insulators <u>Forces</u> friction Know about and describe how objects move on different surfaces Know how some forces require contact and some do not, giving examples Identify and name appliances that require electricity to function Construct a series circuit</p>	<p>Medicine <u>States of matter</u> Solids, liquids and gases, changing state, heating and cooling. Group materials based on their state of matter (solid, liquid, gas) Know about and explore how some materials can change state Know the temperature at which materials change state</p> <p>Treasure</p>

		<p>Know the functions of the organs in the human digestive system Identify and know the different types of teeth that humans have Know the functions of different human teeth</p> <p>Toys <u>Forces and Magnets</u> Magnets and springs Know how some forces require contact and some do not, giving examples Know about and explain how objects attract and repel in relation to objects and other magnets Predict whether magnets will attract or repel and give a reason</p>	<p>Identify and name the components in a series circuit (including cells, wires, bulbs, switches and buzzers) 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</p> <p>Rainforests <u>Plants</u> different parts requirements for growth and life cycles, transportation of water Know the function of different parts of flowering plants and trees Know how water is transported within plants Know the plant life cycle, especially the importance of flowers Know how nutrients, water and oxygen are transported within animals and humans Know how changes to an environment could endanger living things</p>	<p><u>Rocks</u> Classify rocks, formation of fossils, soil Compare and group rocks based on their appearance and physical properties, giving a reason Know how soil is made and fossils formed Know about and explain the difference between sedimentary, metamorphic and igneous rock</p> <p>Zoo <u>Animals including Humans</u> Food chains animal skeletons Know how nutrients, water and oxygen are transported within animals and humans <u>Living things and their habitats</u> Classification Use classification keys to group, identify and name living things Use and construct food chains to identify producers, predators and prey</p>
	Year B	<p>Farming <u>Plants</u> Growing requirements including climates Know the function of different parts of flowering plants and trees Know how water is transported within plants</p>	<p>Angry Plan <u>Living things and their habitats</u> Dangers, environmental changes Know about and explain the difference between sedimentary, metamorphic and igneous rock</p>	<p>In the Garden <u>Animals, including humans</u> Nutrition, digestion, teeth Know about the importance of a nutritious, balanced diet Know about the skeletal and muscular system of a human</p>

		<p>Know the plant life cycle, especially the importance of flowers Know how nutrients, water and oxygen are transported within animals and humans</p> <p>Space <u>Light</u> Reflection, sources, shadows Know what dark is the absence of light Know that light is needed in order to see and is reflected from a surface Know and demonstrate how a shadow is formed and explain how a shadow changes shape Know about the danger of direct sunlight and describe how to keep protected</p> <p><u>Sounds</u> Vibration, ear, pitch, volume Know how sound is made associating some of them with vibrating</p> <p>Know how sound travels from a source to our ears Know the correlation between pitch and the object producing a 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>	<p>Know how changes to an environment could endanger living things</p> <p>Mini-beasts <u>Living things and their habitats</u> classification Use classification keys to group, identify and name living things</p> <p><u>Animals include Humans</u> food chains and life cycles Use and construct food chains to identify producers, predators and prey</p> <p>Changes <u>States of matter</u> Solid, liquids and gases, states of matter Group materials based on their state of matter (solid, liquid, gas)</p> <p>Know the part played by evaporation and condensation in the water cycle</p> <p>Know about and explore how some materials can change state Know the temperature at which materials change state</p>	<p>Identify and name the parts of the human digestive system Know the functions of the organs in the human digestive system Identify and know the different types of teeth that humans have</p> <p>Know the functions of different human teeth</p>
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Year 5 & 6	Year A	<p>All About Me <u>Animals include Humans Growth and development</u> Create a timeline to indicate stages of growth in humans</p> <p><u>Evolution and Inheritance</u> <u>Reproduction</u> Know the process of reproduction in animals Know how the Earth and living things have changed over time Know about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents) Link adaptation over time to evolution Know about evolution and can explain what it is</p> <p>Discovery <u>Evolution and inheritance</u> <u>fossils</u> Know how fossils can be used to find out about the past</p> <p>Toys <u>Forces</u> <u>Levers, pulleys and gears</u></p> <p>Explain how levers, pulleys and gears allow a smaller force to have a greater effect</p>	<p>Trains, Planes and Automobiles <u>Forces</u> – air resistance, friction and gravity Know what gravity is and its impact on our lives Identify and know the effect of air and water resistance Identify and know the effect of friction</p>	<p>Medicine <u>Animals including Humans</u> <u>impact of drugs on the body, circulatory system, nutrients</u> Identify and name the main parts of the human circulatory system Know the function of the heart, blood vessels and blood Know the impact of diet, exercise, drugs and lifestyle on health Know the ways in which nutrients and water are transported in animals, including humans</p> <p><u>Living things and their habitats</u> <u>Microorganisms</u></p> <p>Zoo <u>Living things and their habitats</u> <u>Life cycle, reproduction, classification</u> Know the life cycle of different living things, e.g. mammal, amphibian, insect bird Know the differences between different life cycles Know the process of reproduction in animals 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>
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	<p>Year B</p>	<p>Design <u>Electricity</u> circuits, symbols, variation of functions Compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical & thermal], and response to magnets Compare and give reasons for why components work and do not work in a circuit Draw circuit diagrams using correct symbols Know how the number and voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer</p> <p>Space <u>Earth and Space</u> Movement of Earth and moon, sun, rotation, solar/lunar eclipse Know about and explain the movement of the Earth and other planets relative to the Sun Know about and explain the movement of the Moon relative to the Earth Know and demonstrate how night and day are created Describe the Sun, Earth and Moon (using the term spherical). Know what gravity is and its impact on our lives</p> <p><u>Light</u> Light travelling, sources, shadows, reflection Know how light travels Know and demonstrate how we see objects</p>	<p>Mini-beats <u>Living things and their habitats</u> classification 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> <p><u>Evolution and inheritance</u> adaptation Know how the Earth and living things have changed over time Know how animals and plants are adapted to suit their environment Link adaptation over time to evolution</p> <p>Changes <u>Properties and changes of materials</u> dissolve, solid liquid gases, reversible and irreversible changes Compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical & thermal], and response to magnets Know how a material dissolves to form a solution; explaining the process of dissolving Know and show how to recover a substance from a solution Know and demonstrate how some materials can be separated (e.g. through</p>	<p>In the Garden <u>Living things and their habitats</u> reproduction, seed dispersal Know the process of reproduction in plants Know the ways in which nutrients and water are transported in animals, including humans</p> <p><u>Animals including humans</u> diet Know the impact of diet, exercise, drugs and lifestyle on health</p>
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