

Autumn

MAPS	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
My Environment	All About Me My Environment	My Environment Around the World	Everyday Materials Seasonal Change – autumn to winter	Living things and their Habitats	Forces and Magnets Rocks	Animals Including Humans Living things and their Habitats	Earth and Space Living things and their Habitats	Animals including Humans Light
<u>My Environment</u> <i>Has a sense of own immediate family and relations and pets - Notices detailed features of objects in their environment - Seeks to acquire basic skills in turning on and operating some digital equipment</i>	<u>My Environment</u> <i>Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world</i> <i>Developing an understanding of growth, decay and changes over time - - Shows care and concern for living things and the environment</i>	<u>My Environment</u> <i>Looks closely at similarities, differences, patterns and change in nature</i>	<u>Everyday Materials</u> <i>Distinguish between an object and the material from which it is made.</i> <i>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</i> <i>Describe the simple physical properties of a variety of everyday materials.</i> <i>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</i> <u>Seasonal Change</u> <i>Observe changes across the four seasons</i> <i>Observe and describe weather associated with the seasons and how day length varies</i>	<u>Living things and their Habitats</u> <i>Explore and compare the differences between things that are living, dead, and things that have never been alive.</i> <i>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.</i> <i>Identify and name a variety of plants and animals in their habitats, including micro-habitats.</i> <i>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.</i>	<u>Forces and Magnets</u> <i>Compare how things move on different surfaces.</i> <i>Notice that some forces need contact between two objects, but magnetic forces can act at a distance.</i> <i>Compare and group together a variety of everyday materials on the basis of whether or not they are attracted to a magnet, and identify some magnetic materials.</i> <i>Observe how magnets attract or repel each other and attract some materials and not others.</i> <i>Describe magnets as having two poles.</i>	<u>Animals Including Humans</u> <i>Describe the simple functions of the basic parts of the digestive system in humans.</i> <i>Identify the different types of teeth in humans and their simple functions.</i> <i>Construct and interpret a variety of food chains, identifying producers, predators and prey.</i>	<u>Earth and Space</u> <i>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</i> <i>Describe the movement of the Moon relative to the Earth.</i> <i>Describe the Sun, Earth and Moon as approximately spherical bodies.</i> <i>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</i>	<u>Animals including Humans</u> <i>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</i> <i>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</i> <i>Describe the ways in which nutrients and water are transported within animals, including humans</i>

					<i>Predict whether two magnets will attract or repel each other, depending on which poles are facing.</i> <u>Rocks</u> <i>Recognise that soils are made from rocks and organic matter.</i> <i>Describe in simple terms how fossils are formed when things that have lived are trapped within rock.</i> <i>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</i>	<u>Living things and their Habitats</u> <i>Recognise that living things can be grouped in a variety of ways.</i> <i>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</i> <i>Recognise that environments can change and that this can sometimes pose dangers and have an impact on living things.</i>	<u>Living things and their Habitats</u> <i>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</i> <i>Describe the life process of reproduction in some plants and animals</i>	<u>Light.</u> <i>Recognise that light appears to travel in straight lines.</i> <i>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.</i> <i>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.</i> <i>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</i>
			Key Vocabulary: <u>Everyday Materials</u> wood, plastic, glass, paper, metal, rock, water, material, hard / soft, stretchy / stiff, shiny/dull	Key Vocabulary: <u>Living things and their Habitats</u> living, dead, alive, habitat, food, shelter, life processes, food chain,	Key Vocabulary: <u>Forces and Magnets</u> force, push, pull, friction, gravity, magnet, attract, repel	Key Vocabulary: <u>Animals Including Humans</u> oesophagus, small intestine, large	Key Vocabulary: <u>Earth and Space</u> air resistance, water resistance, Newtons, gravity, friction, mechanism	Key Vocabulary: <u>Animals including Humans</u> circulatory system, blood vessel,

			<u>Seasonal Change</u> hail, sleet, frost, fog, mist, season, weather, daylight adapt	food source, habitat, micro habitats	<u>Rocks</u> rock, sedimentary rock, metamorphic rock, igneous rock, fossil, soil	intestine, canine, incisor, molar <u>Living things and their Habitats</u> classification, classification keys, environment, habitat, human impact, migrate, hibernate	<u>Living things and their Habitats</u> life process, reproduction, offspring, sexual, asexual	vein, artery, oxygenated, deoxygenated <u>Light</u> straight lines, light rays
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Spring

MAPS	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Animals	Space Growing on the Farm Easter	Vets and animals Food/healthy eating Mini Beasts Plants and life cycles/ Environment	Animals including Humans	Animals including Humans Plants	Animals Including Humans	States of Matter Sound	Forces Animals Including Humans	Electricity
<i>Can talk about some of the things they have observed such as plants, animals, natural and found objects</i>	<i>Developing an understanding of growth, decay and changes over time</i> <i>Shows care and concern for living things and the environment</i>	<i>Knows about similarities and differences in relation to places, objects, materials and living thing</i> <i>Talks about the features of their own immediate environment and how environments might vary from one another</i>	<u>Animals including Humans</u> <i>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</i> <i>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</i> <i>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</i> <i>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</i>	<u>Animals including Humans</u> <i>Understand that animals, including humans, have offspring which grow into adults</i> <i>Describe the basic needs of animals, including humans, for survival</i> <i>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</i> <u>Plants</u> <i>Observe and describe how seeds and bulbs grow into mature plants</i> <i>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</i>	<u>Animals Including Humans</u> <i>Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</i> <i>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.</i>	<u>States of Matter</u> <i>Identify how sounds are made, associating some of them with something vibrating.</i> <i>Recognise that vibrations from sounds travel through a medium to the ear.</i> <i>Find patterns between the pitch of a sound and features of the object that produced it.</i> <i>Find patterns between the volume of a sound and the strength of the vibrations that produced it.</i>	<u>Forces</u> <i>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</i> <i>Identify the effects of air resistance, water resistance and friction that act between moving surfaces.</i> <i>Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</i> <u>Animals including Humans</u>	<u>Electricity</u> <i>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</i> <i>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.</i> <i>Use recognised symbols when representing a simple circuit in a diagram.</i>

						<i>Recognise that sounds get fainter as the distance from the sound source increases.</i> <u>Sound</u> <i>Identify how sounds are made, associating some of them with something vibrating.</i> <i>Recognise that vibrations from sounds travel through a medium to the ear.</i> <i>Find patterns between the pitch of a sound and features of the object that produced it.</i> <i>Find patterns between the volume of a sound and the strength of the vibrations that produced it.</i> <i>Recognise that sounds get fainter as the</i>	<i>Describe the changes as humans develop into old age</i>	
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						<i>distance from the sound source increases.</i>		
			Key Vocabulary: <u>Animals Including Humans</u> <i>fish, amphibian, reptile, bird, mammal, carnivore, herbivore, omnivore, feature, human, diet, senses, vertebrate</i>	Key Vocabulary: <u>Animals including Humans</u> <i>air, food, reproduce, adult, offspring, exercise, hygiene, balanced diet</i> <u>Plants</u> <i>germination, growth, reproduction, temperature</i>	Key Vocabulary: <u>Animals Including Humans</u> <i>vertebrates, invertebrates, nutrients, carbohydrates, protein, fats, minerals, stomach, heart, lungs, muscles, skeleton, support, protection, movement</i>	Key Vocabulary: <u>States of Matter</u> <i>solid, liquid, gas, evaporation, condensation, particle, temperature, freezing, heating</i> <u>Sound</u> <i>vibration, sound wave, volume, pitch, insulator, sound source</i>	Key Vocabulary: <u>Forces</u> <i>air resistance, water resistance, friction, gravity, Newtons, mechanism</i> <u>Animals including Humans</u> <i>womb, foetus, embryo, gestation, elderly, development, puberty</i>	Key Vocabulary: <u>Electricity</u> <i>terminal, connection, voltage, current, resistance</i>

Summer

MAPS	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			Seasonal Change – spring to summer Plants	Everyday Materials	Plants Light	Electricity	Properties of Materials	Living things and their Habitats Evolution and Inheritance
<i>Enjoys playing with small world reconstructions, building on first-hand experiences, e.g. visiting farms, garages, train tracks, walking by river or lake</i> <i>Plays with water to investigate “low technology” such as washing and cleaning - Uses pipes,</i>		<i>Makes observations of animals and plants and explains why some things occur, and talks about changes</i>	<u>Seasonal Change</u> <i>Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies</i> <u>Plants</u> <i>Identify and name a variety of common wild and garden plants, including</i>	<u>Everyday Materials</u> <i>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</i> <i>Describe how the shapes of solid objects made from some materials can be changed by squashing,</i>	<u>Plants</u> <i>Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.</i> <i>Explore the requirements of plants for life and growth (air, light,</i>	<u>Electricity</u> <i>Identify common appliances that run on electricity.</i> <i>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</i>	<u>Properties of Materials</u> <i>Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity</i>	<u>Living things and their Habitats</u> <i>Give reasons for classifying plants and animals based on specific characteristics.</i> <i>Describe how living things are classified into broad groups according to common</i>

funnels and other tools to carry			deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees.	bending, twisting and stretching	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. <u>Light</u> Notice that light is reflected from surfaces. Recognise that he/she needs light in order to see things and that dark is the absence of light. Recognise that light from the sun can be dangerous and that there are ways to protect eyes. Recognise that shadows are	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. Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. Recognise some common conductors and insulators, and associate metals with being good conductors	(electrical and thermal), and response to magnets. Recognise that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. Give reasons, based on evidence from comparative and fair tests, for the particular 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, and that this kind of change is not usually reversible,	observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. <u>Evolution and Inheritance</u> 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.
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					<i>formed when the light from a light source is blocked by a solid object.</i> <i>Find patterns in the way that the size of shadows change.</i>		<i>including changes associated with burning and the action of acid on bicarbonate of soda.</i>	
			Key Vocabulary: <u>Seasonal Change</u> daylight, temperature, seasons, bud, mini beasts <u>Plants</u> stem, seed, branch, petal, leaf, trunk, branches	Key Vocabulary: <u>Everyday Materials</u> transparent, translucent, opaque, flexible, rigid, absorbent, waterproof	Key Vocabulary: <u>Plants</u> transported, seed dispersal, pollination, seed formation, life cycle, nutrients <u>Light</u> light source, reflect, transparent, translucent, opaque, shadow	Key Vocabulary: <u>Electricity</u> appliance, circuit, series, cell, break, conductor, insulator	Key Vocabulary: <u>Properties of Materials</u> solubility, solution, dissolve, filter, evaporate, sieve, reversible, irreversible	Key Vocabulary: <u>Living things and their Habitats</u> Organism, micro-organism fungus, mushrooms, classification, arachnid, mollusc, insect, crustacean <u>Evolution and Inheritance</u> adaption, evolution, inheritance