

St Anne's C of E Primary School Curriculum Plan

Subject: Science

Year: 2

Term: Autumn 1



Unit: Uses of Everyday Materials



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that)	Children will understand (that)	Children will be able to
<p>material - anything that is used to make something else.</p> <p>object - something that can be seen and touched.</p> <p>property - the way in which a material is described.</p> <p>obstacle - something that blocks the way.</p> <p>construction - the process of building something.</p> <p>brick - a hard material that is used to build walls.</p> <p>suitable - is right for a purpose.</p> <p>property - the way in which a material is described.</p> <p>stretchy - something that can pull apart without breaking; elastic.</p>	<p>Objects around us are made up or constructed of different materials.</p> <p>properties of a variety of everyday materials.</p> <p>some materials are suitable or unsuitable for particular purposes.</p> <p>some materials are stronger than others.</p> <p>objects can be changed in different ways.</p> <p>some materials can be melted.</p>	<p>what a material is.</p> <p>(why) some materials are suitable for specific uses.</p> <p>properties of materials that make them suitable or unsuitable for particular purposes.</p> <p>materials differ in strength and can be strengthened by changing their structure.</p> <p>the shapes of objects can be changed by twisting, bending, squashing or stretching.</p>	<p>Question Ask simple questions based on information they already have.</p> <p>Recognise questions can be answered in different ways</p> <p>Plan Simple test considering equipment that they will use, how they will carry out a test and how they will record the results.</p> <p>Make a prediction of the test of a test.</p> <p>Set-up</p>

<p>elastic - something that can pull apart without breaking; stretchy.</p> <p>force - a pressure applied to something that makes it change shape or move.</p> <p>bend - to shape or force something into a curved shape.</p> <p>hinder - to hold back or stop something from moving forwards.</p> <p>floppy - to hang loosely.</p> <p>limit - to hold back or stop.</p> <p>twist - to bend or turn something in opposite directions.</p> <p>stretch - to pull something apart by its ends.</p> <p>squash - to push or press something until it is flat or flatter.</p> <p>waterproof - to not let water pass through.</p> <p>protective - to keep safe.</p> <p>fluorescent - bright and very easy to see.</p> <p>safety - being safe from danger.</p> <p>mackintosh - a waterproof raincoat.</p> <p>bound - the process of sticking materials together.</p> <p>highway - a main road.</p> <p>road - a pathway for cars.</p> <p>merchant - someone who buys and sells goods.</p> <p>John McAdam - an inventor who changed how roads were built.</p>		<p>some materials can be melted to change their shape.</p> <p>some materials can be melted and mixed with other materials to change their properties.</p>	<p>perform simple tests selecting suitable resources to use</p> <p>Observe Compare the strength of different materials.</p> <p>Compare how some objects change after stretching while other objects return to their original form.</p> <p>Compare how the shapes of objects change when they are twisted, bent, squashed or stretched.</p> <p>Record use their observations and ideas to suggest answers to questions. gather and record data to help in answering questions.</p> <p>Conclude Link the suitability of materials for particular purposes with the uses of everyday tools.</p> <p>Evaluate The types of materials they would use for a given task or activity.</p>
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St Anne's C of E Primary School Curriculum Plan

Subject: Science

Year: 2

Term: Autumn 2



Unit: Living Things and their Habitats



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that)	Children will understand (that)	Children will be able to
<p>reproduce - to create young, offspring or babies</p> <p>excrete - to get rid of unwanted substances from the body</p> <p>respire - to breathe.</p> <p>senses - sight, hearing, touch, taste and smell.</p> <p>nutrition - eating food to enable living things to grow and be healthy.</p> <p>nutrient - part of food that helps living things live and grow.</p> <p>habitat - the natural place where an living thing can survive</p> <p>microhabitat - a small natural area where a living thing can survive, found within larger habitats.</p>	<p>a variety of plants and animals in their habitats, including microhabitats.</p> <p>(what) specific animals eat through research.</p> <p>different sources of food. (what) could affect a food chain.</p> <p>different foods that come from the same natural source.</p> <p>the difference between a habitat and a microhabitat.</p>	<p>differences between things that are living, dead, and things that have never been alive.</p> <p>the 7 characteristics of living things.</p> <p>living things depend on each other for survival.</p> <p>all animals need to eat to survive. (how) animals obtain their food from plants and other animals, using the idea of a simple food chain.</p> <p>(how) all animals and humans relate to each other in a food chain.</p>	<p>Question ask diverse questions to find out what animals eat and where they find their food.</p> <p>ask simple questions and recognise that they can be answered in different ways.</p> <p>Observe identify and classify. observe closely, using simple equipment.</p> <p>describe what a food chain is. explain how foods have changed from their natural source</p>

<p>fungi - a group of living organisms which are classified in their own kingdom.</p> <p>survive - to remain alive.</p> <p>shelter - something that covers or protects.</p> <p>suitable - right for a particular purpose.</p> <p>producer - a plant at the start of a food chain</p> <p>consumer - a living thing that eats other living things.</p> <p>omnivore - an animal that eats both plants and meat.</p> <p>herbivore - an animal that only eats plants.</p> <p>carnivore - an animal that only eats meat.</p> <p>colony - a group of things or people.</p> <p>condition - a particular state of being.</p> <p>insect - a small living thing that has 6 legs.</p> <p>antennae - are jointed and extend forward from the head.</p> <p>caterpillar - the wormlike larva of an insect and usually a butterfly or moth.</p> <p>life cycle - the sequence of changes that living things go through as they grow, reproduce and die.</p> <p>food chain - the order in which living things eat other living things.</p> <p>rot - decay.</p> <p>frozen food - food that is kept very cold so it does not perish.</p> <p>canned - food stored in a tin so that it does not perish so quickly.</p>		<p>food we eat comes from a natural source.</p> <p>living things need certain conditions to survive.</p>	<p>Record design a microhabitat where living things could survive</p> <p>gather and record data to help in answering questions.</p> <p>Conclude explain why an animal may or may not be suited to certain conditions.</p> <p>use their observations and ideas to suggest answers to questions.</p> <p>Evaluate</p>
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St Anne's C of E Primary School Curriculum Plan

Subject: Science

Year: 2

Term: Spring 1



Unit: Living Things and their Habitats- Habitats around the World



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that)	Children will understand (that)	Children will be able to
<p>organism - a living thing made up of one or more cells and able to carry on the activities of life.</p> <p>environment - the surroundings or conditions that a living organism (people, animals, plants) finds themselves in.</p> <p>habitat - a place where living organisms live.</p> <p>microhabitat - a small area which differs somehow from the surrounding habitat.</p> <p>rainforest - a forest in a tropical area that receives a lot of rain.</p> <p>endangered - animals or plants that may soon not exist because there are very few left alive.</p> <p>biodiversity - a variety of plant and animal life in a particular habitat or place.</p>	<p>what a habitat is.</p> <p>most living things live in habitats to which they are suited.</p> <p>which animals might live in a range of habitats.</p> <p>a variety of plants and animals in their habitats, including microhabitats.</p> <p>how rainforests are endangered.</p> <p>what you can do to care for a habitat.</p> <p>about different ocean life.</p> <p>the differences between the Arctic and Antarctic.</p> <p>the animals which live in both polar habitats.</p>	<p>environments are constantly changing.</p> <p>living organisms are suited to live in one or more habitats.</p> <p>what animals are best suited to live in desert, underground and ocean habitats.</p> <p>why rainforests are important.</p> <p>how you can help reduce the impact humans have on a habitat.</p> <p>an ocean habitat.</p>	<p>Question ask simple questions and recognise that they can be answered in different ways.</p> <p>Plan investigate, measure and record soil habitats.</p> <p>Set-up plan a campaign to help protect a rainforest.</p> <p>Observe identify and classify. describe the Arctic and Antarctic climates.</p> <p>Record describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. gather and record data to help answer questions.</p>

<p>ocean - a very large area of sea; they cover 70% of the world's surface.</p> <p>plankton - tiny plants and animals which are eaten by other sea creatures.</p> <p>coral reef - a ridge of rock in the sea which is home to many sea animals and plants.</p> <p>trench - a deep, narrow hole in the seabed.</p> <p>ecosystem - an area where animals and plants live, and where they rely on one another to survive.</p> <p>desert - an area, often covered with sand or rocks, where there is very little water and not many plants.</p> <p>Arctic - the northern polar region.</p> <p>Antarctic - the world's southernmost continent and the site of the South Pole.</p> <p>caribou - a large North American reindeer.</p> <p>narwhal - a small Arctic whale, the male of which has a long forward-pointing spirally twisted tusk.</p> <p>tundra - a treeless ecosystem found in the Arctic.</p> <p>mate - to come or bring together for breeding.</p> <p>moisture - liquid such as water in the form of very small drops, either in the air or in a substance</p> <p>extinct - no longer exists.</p> <p>climate - the general weather condition usually found in a particular place.</p>			<p>Conclude use their observations and ideas to suggest answers to questions. compare results and identify species more suited to living in damp soils.</p> <p>Evaluate</p>
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<p>pollution - waste that is disposed of into the environment</p> <p>poaching - hunting animals to sell.</p>			
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St Anne's C of E Primary School Curriculum Plan

Subject: Science

Year: 2

Term: Spring 2



Unit: Animals, including humans- Growth



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that)	Children will understand (that)	Children will be able to
<p>nutrition - food that provides nourishment to live and grow healthy being well and fit.</p> <p>nutrients - substances in food that help to keep the body healthy.</p> <p>oxygen - a gas found in the air that is needed for survival.</p> <p>survival - to continue to live or exist.</p> <p>shelter - a structure that gives protection from predators and weather.</p> <p>healthy - being well and fit.</p>	<p>the basic needs of animals, including humans.</p> <p>what humans need to survive.</p> <p>humans have basic needs and the things they want.</p> <p>the 5 food groups.</p> <p>examples of foods that form part of a healthy diet.</p>	<p>(explain) the basic needs of animals, including humans.</p> <p>how animals adapt and survive by ensuring their basic needs are met.</p> <p>(explain) what humans need to survive.</p> <p>the difference between basic human needs and the things humans want.</p> <p>how and why the 5 food groups are important for human health.</p> <p>the importance of a balanced diet.</p>	<p>Question</p> <p>Plan</p> <p>Set-up perform simple tests.</p> <p>Observe identify and classify</p> <p>Record sort food into the 5 food groups.</p> <p>Conclude use their observations and ideas to suggest answers to questions.</p> <p>Evaluate</p>

<p>non-essential - not needed, can live without.</p> <p>survive - to live or exist.</p> <p>vital - needed, cannot do without.</p> <p>grow - expand or get bigger.</p> <p>protein - a food group, consisting of meat, seafood, eggs, nuts and more, which help the body repair cells.</p> <p>carbohydrate - a food group, including rice, bread and pasta, which give the body energy.</p> <p>dairy - a food group, including cheese, milk and yoghurt, which contains calcium to keep our bones strong.</p> <p>fat - a food group that is important for energy but only needed in small amounts.</p> <p>vitamins - a natural substance found in fruits and vegetables which help our immune system and growth.</p> <p>fresh food - foods which have not been changed at all.</p> <p>pre-cooked food - foods that have been cooked ahead of time or cooked partially in advance of further cooking.</p>	<p>(how) exercise impacts human bodies.</p> <p>it is important for humans to have a good hygiene routine.</p>	<p>eating pre-cooked or processed food is not always a healthy choice.</p> <p>exercising regularly is important for human health.</p> <p>how regular exercise keeps humans healthy.</p> <p>good hygiene is needed to remain healthy.</p> <p>(how) to have a good hygiene routine.</p> <p>(how) a good hygiene routine can stop the spread of germs.</p>	
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<p>processed food - foods that have been changed from their natural form.</p> <p>balanced diet - a diet which contains a variety of food types that help your body to be healthy.</p> <p>exercise - activity requiring physical effort, carried out to improve health and fitness.</p> <p>strength - being strong.</p> <p>exercise - activity requiring physical effort, carried out to improve health and fitness.</p> <p>coordination - being able to work different muscles and limbs at the same time</p> <p>flexibility - being able to bend easily without breaking.</p> <p>balance - keeping steady.</p> <p>hygiene - the things you can do to keep yourself and your surroundings clean.</p> <p>prevent - to stop.</p> <p>germs - bacteria and viruses that cause illness.</p> <p>virus - tiny organisms that cause disease in humans, animals and plants.</p>			
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St Anne's C of E Primary School Curriculum Plan

Subject: Science

Year: 2

Term: Summer 1



Unit: Animals, including humans- Life Cycles



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that)	Children will understand (that)	Children will be able to
<p>life cycle - a diagram showing the changes in the life of a living thing.</p> <p>grow - to become larger and develop.</p> <p>survive - to continue to live.</p> <p>adult - a fully grown human.</p> <p>independent - not needing the support of others.</p> <p>helpless - unable to take care of themselves.</p> <p>foetus - a baby growing inside its mother's womb.</p> <p>toddler - a young child learning to walk.</p>	<p>animals, including humans, have offspring which grow into adults.</p> <p>...and identify the stages of a human life cycle.</p> <p>features inherited from a parent.</p> <p>the different stages of a butterfly's life.</p> <p>the stages of a frog's life cycle.</p>	<p>why some animals are more challenging to match.</p> <p>each stage of the human life cycle.</p> <p>how a butterfly moves between the stages in its life cycle.</p> <p>the life cycle of a butterfly and the process of metamorphosis.</p> <p>how a frog moves between the stages in its life cycle.</p>	<p>Question ask simple questions and recognise that they can be answered in different ways.</p> <p>Plan predict the height of a chick.</p> <p>Set-up</p> <p>Observe compare two stages of the human life cycle. compare the life cycle of a chicken and human. match offspring with their parents. identify and classify. compare some similarities and differences between the life cycle of a frog and other animals.</p> <p>Record draw the human life cycle. create a bar chart.</p>

<p>womb - area of the mother's body where the foetus grows.</p> <p>reproduction - the process of producing offspring.</p> <p>offspring - the child, or young, of an animal or plant.</p> <p>differences - not being alike.</p> <p>resemble - to look similar.</p> <p>gene - causes a characteristic to be passed from parent to offspring.</p> <p>inherit - receive a parent's gene.</p> <p>transformation - a change in appearance or form.</p> <p>metamorphosis - the processes of insects, and some animals, developing into adult forms through a cycle of change.</p> <p>transformation - a change in appearance or form.</p> <p>chrysalis - a kind of vessel in which a caterpillar changes into a butterfly.</p> <p>caterpillar - the larva of a butterfly or moth, which has a segmented body resembling a worm.</p>			<p>gather and record data to help in answering questions.</p> <p>Conclude use their observations and ideas to suggest answers to questions.</p> <p>Evaluate</p>
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<p>larva - offspring of certain animals that undergo great physical changes before they become adults.</p> <p>frog - a small animal that has smooth skin, lives in water and on land and has powerful back legs to jump.</p> <p>froglet - a young frog that has recently changed from being a tadpole.</p> <p>frogspawn - a group of frog's eggs.</p> <p>tadpole - a small creature with a large head and long tail which lives in water and grows into a frog or a toad.</p> <p>amphibian - an animal, such as a frog, that lives both on land and in water and produces eggs in water.</p> <p>chick - a young bird.</p> <p>hatchling - a young bird newly emerged from an egg.</p> <p>bar chart - a graph used to show data.</p> <p>predict - make a reasoned guess.</p>			
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St Anne's C of E Primary School Curriculum Plan

Subject: Science

Year: 2

Term: Summer 2



Unit: Plants



Vocabulary	Knowledge	Understanding	Skills
	Children will know (that)	Children will understand (that)	Children will be able to
<p>germination - the process by which a plant grows from a seed.</p> <p>bulb - a plant bud that begins to grow underground.</p> <p>seed - a part of a plant from which a new plant can grow.</p> <p>plant - a living thing that uses sunlight to make their own food.</p> <p>seedling - a young plant grown from seed.</p> <p>carbon dioxide - plants use this to make their own food in a process called photosynthesis.</p> <p>photosynthesis - the process in which green plants use sunlight to make their own food.</p> <p>glucose - a sugar that plays a vital role in the metabolism of most living organisms.</p> <p>oxygen - one of the main gases that make up air.</p>	<p>the difference between seeds and bulbs.</p> <p>(how) plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>(how) a plant makes its own food through the process of photosynthesis.</p> <p>plants use carbon dioxide, sunlight and water to create glucose.</p> <p>plants according to their habitats. (what) conditions might be like for plants in their habitats.</p>	<p>plants need space, water, sunlight and a suitable temperature to grow.</p> <p>the life cycle of a plant.</p> <p>the requirements of plants for germination, growth and survival, as well as, the processes of reproduction and growth in plants.</p> <p>(how) plants adapt to suit their environment.</p>	<p>Question ask simple questions and recognise that they can be answered in different ways.</p> <p>Plan make a prediction.</p> <p>Set-up set up an experiment to find out what plants need to grow. set up a fair test. perform simple tests</p> <p>Observe observe and talk about seeds and bulbs. observe and describe how seeds and bulbs grow into mature plants. identify and classify. observe closely, using simple equipment.</p> <p>Record</p>

<p>energy - something which makes things move.</p> <p>life cycle - a series of stages a living thing goes through during its life.</p> <p>pollination - the process that allows plants to reproduce.</p> <p>reproduction - the creation of new plants by one or more parent plants.</p> <p>crop - a plant or plant product that is grown and harvested.</p> <p>forest - places where there are mostly trees.</p> <p>desert - a dry place that receives little or almost no rainfall.</p> <p>survive - to remain alive.</p> <p>adapt - to change behaviour so that it is easier to live in a particular place.</p> <p>condition - a state of being.</p> <p>thrive - to do well.</p> <p>insulate - a material used to stop heat passing from one conductor to another.</p> <p>manure - animal waste</p> <p>healthy - good for a living thing's health.</p> <p>compare - to look for things to see if they are similar or different.</p> <p>investigate - to observe closely through testing.</p> <p>predict - an act of saying what will or might happen.</p> <p>control - ability to keep within bounds.</p> <p>experiment - to test.</p> <p>method - a certain way of doing something.</p>			<p>explain the difference between a bulb and a seed.</p> <p>produce a diagram to explain the life cycle of a plant.</p> <p>explain why their plant did or did not thrive using the control plant as a comparison.</p> <p>draw the inside of a seed and a bulb.</p> <p>provide scientific explanations of the life cycle of a plant.</p> <p>sort plants according to their habitats.</p> <p>use observations and ideas to suggest answers to questions.</p> <p>record results.</p> <p>compare the results to their prediction.</p> <p>gather and record data to help in answering questions</p> <p>Conclude</p> <p>write a simple conclusion</p> <p>Evaluate</p>
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