

| | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
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| Year 1 | <p>The Human Body – Do the oldest children have the longest feet? Seasonal changes – What are the main changes in each season?</p> <ol style="list-style-type: none"> Name and identify parts of the human body Draw and label parts of the human body Say which part of the body is associated with each sense. Changes in autumn <p>Working Scientifically</p> <ol style="list-style-type: none"> Asking simple questions Observe closely Perform simple tests Collect and record data | <p>Materials – Which material would be the best for a pair of curtains? Seasonal changes– What are the main changes in each season?</p> <ol style="list-style-type: none"> Explore materials – Wood, plastic, glass and metal Identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock Distinguish between an object and the material from which it is made. Compare and group together a variety of everyday materials based on their simple physical properties. Changes in Winter <p>Working Scientifically</p> <ol style="list-style-type: none"> Identifying and classifying Using simple equipment Observing closely Perform simple tests Gathering and recording data Ask simple questions | <p>Planting A – How do the things I plant change over time? Animals – Are all animals the same?</p> <ol style="list-style-type: none"> Understand that their plants will need to start to grow in the classroom where it is warmer Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets) Identify and name a variety of common animals that are carnivores, omnivores and herbivores <p>Working Scientifically</p> <ol style="list-style-type: none"> Asking simple questions and recognising that they can be answered in different ways Gathering and recording data to help answer questions Identifying and classifying Use observations and ideas to suggest answers to questions | <p>Caring for the planet – How can we care for our planet? Seasonal changes (spring) - What are the main changes in each season? Planting B – How do the things I plant change over time?</p> <ol style="list-style-type: none"> Observe changes across the four seasons Observe and describe the weather associated with the seasons and how day lengths varies Identify and describe the basic structure of a variety of common flowering plants, including trees <p>Working Scientifically</p> <ol style="list-style-type: none"> Explore the world around them and raise their own questions Asking simple questions and recognise that they can be answered in different ways Gathering and recording data to help in answering questions Observing closely, using simple equipment | <p>Plants- How can we sort plants into different groups? Planting C – How do the things I plant change over time?</p> <ol style="list-style-type: none"> Identify and describe the basic structure of a variety of common flowering plants, including trees. Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. <p>Working Scientifically</p> <ol style="list-style-type: none"> Identifying and classifying Observing closely, using simple equipment Gathering and recording data Using their observations and ideas to suggest answers to questions | <p>Growing and Cooking – Where does my food come from? Seasonal changes – What are the main changes in each season?</p> <ol style="list-style-type: none"> What happens to seeds overtime? Which parts of the plant can be used for food? Where does my food come from? <p>Working Scientifically</p> <ol style="list-style-type: none"> Using observations and ideas to suggest answers to questions Verbally state what they are going to investigate Explain what they found out |
| | <p>Vocabulary: Hair, eye, nose, mouth, elbow, hand, leg, neck, ear, teeth, arm, knee, feet Smell, touch, taste, sight, sound Weather, season</p> | <p>Vocabulary: Material, soft, hard, light , heavy , soft, rough, smooth Glass, rock, metal, plastic, wood, Floating, sinking, absorbency</p> | <p>Vocabulary: Animal, mammal, bird, amphibians, reptiles, fish, carnivores, omnivores, herbivores</p> | <p>Vocabulary: Earth Spring, daylight, weather, season, daylight, night, Plant, seed, Flower</p> | <p>Vocabulary: Flower, petal, leaf, stem, roots, truck, fruit, wildflower, deciduous, evergreen, seeds, growth, measure</p> | <p>Vocabulary: Crops, fruit, vegetable, seed, farmer, cook, plant, ingredients, vegetarian, vegan</p> |
| | <p>Prior Learning:</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> |
| Year 2 | <p>Animals needs for survival – What can you do to help care for mammals? Humans – Do the oldest children have the most teeth?</p> <ol style="list-style-type: none"> Find out and describe the basic needs of animals including humans for survival (water, air and food) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. <p>Working Scientifically</p> <ol style="list-style-type: none"> Asking simple questions and recognise that they can be answered in different ways Gathering and recording data Identifying and classifying Observe closely, using simple equipment Use their observations and suggest answers to questions | <p>Materials – why is it important to reuse and recycle? Sustainability – Plastic – How is plastic helpful and harmful?</p> <ol 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. How is plastic harmful? <p>Working Scientifically</p> <ol style="list-style-type: none"> Performing simple tests Use simple features to compare objects Ask simple questions and recognise that they can be answered in different ways Observing closely, using simple equipment. Use their observations and ideas to suggest answers to questions Explore the world around them and raise their own questions | <p>Plants (Light &Dark) – Do plants grow healthier in the light or dark?</p> <ol style="list-style-type: none"> Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. <p>Working Scientifically</p> <ol style="list-style-type: none"> Observing closely, using simple equipment Asking simple questions and recognising that they can be answered in different ways Performing simple tests | <p>Living things and their habitats – what different habitats are there on planet Earth and what lives in each habitat? (start in T3)</p> <ol style="list-style-type: none"> Identify that most living things live in habitats to which they are suited and describe how different habitats provide the basic needs of different kinds of animals and plants, and how they depend on each other. Identify and name a variety of plants and animals in their habitats, including microhabitats Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, identify and name different sources of food. Explore and compare the differences between things that are living, dead, and thing that have never been alive. <p>Working Scientifically</p> <ol style="list-style-type: none"> Gathering and recording data to help in answering questions. Using their observations and ideas to suggest answers to questions. Identifying and classifying Observing closely, using simple equipment | <p>Bulbs & Seeds Growing up</p> <ol 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. Notice that animals, including humans, have offspring which grow into adults. <p>Working Scientifically</p> <ol style="list-style-type: none"> Observing closely Using simple equipment Record and communicate their findings in a range of ways and begin to use simple scientific knowledge Ask simple questions and recognise that they can be answered in different ways Performing simple tests | <p>Bulbs & Seeds – How do bulbs and seeds change over time? Growing up – Are there patterns between the life cycle of different animals? Wildlife – Why is it important to care wildfire?</p> <ol style="list-style-type: none"> Notice that animals, including humans, have offspring which grow into adults. Observe and describe how seeds and bulbs grow into mature plants <p>Working Scientifically</p> <ol style="list-style-type: none"> Identifying and classifying Ask simple questions Observing closely Using simple equipment Asking simple questions and recognising that they can be answered in different ways |
| | <p>Vocabulary: Mammals, Birds, Fish, Amphibians, Reptiles, Humans Carnivore, Herbivore, Omnivore</p> | <p>Vocabulary: Material, smooth, rough, flexible, rigid, natural material, man-made material, brittle, flexible, transparent, translucent , opaque</p> | <p>Vocabulary: plant, flower, sunlight, independent variable, dependent variable, controlled variables</p> | <p>Vocabulary: Deciduous tree, evergreen tree, habitat, carnivore, herbivore, arctic plants, hibernate, desert, ocean</p> | <p>Vocabulary: Plant, bulb, seed, shoot, roots, sunlight, temperature, growth, observe measurement, lifecycle</p> | <p>Vocabulary: Habitat, wildlife, nature, lifecycle, egg, temperature, compare</p> |
| | <p>Prior Learning: Yr1 – Children identified familiar mammals and described their basic structure. Children should know that all animals need air, water, food and shelter to survive.</p> | <p>Prior Learning: Yr1 – Children explored a range of familiar materials and carried out simple tests to explore floating, sinking, melting and absorbency.</p> | <p>Prior Learning: YR1 – children identified the key parts of a plants and trees, and what a plant need to grow healthy.</p> | <p>Prior Learning: Yr1 – Children compared deciduous and evergreen trees, names of common animals, identified a variety of animals that are carnivores, omnivores and herbivores.</p> | <p>Prior Learning: Yr1 – Children observed what happen to seeds over time, and what parts of the plants can be used for food. They discussed that plants need a warm environment to grow.</p> | <p>Prior Learning: Yr1 – Children observed what happen to seeds over time.</p> |
| Year 3 | <p>Skeletons – How can animals be sorted and grouped based on their skeletons? Movement Nutrition & Diet – What is a balanced diet and is it important?</p> <ol style="list-style-type: none"> Identify that humans and some other animals have skeletons and muscles for support, protection and movement. Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot | <p>Food waste – What is food waste and how can it be reduced? Rocks – How can rocks be identified and grouped based on their properties?</p> <ol style="list-style-type: none"> Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. <p>Working Scientifically</p> | <p>Fossils – How are fossils formed? Soils – How has human activity caused soil loss and what is the living impact?</p> <ol style="list-style-type: none"> 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. <p>Working Scientifically</p> <ol style="list-style-type: none"> Asking relevant questions and using different types of scientific enquires to answer them. | <p>Light – How does the distance between the light source and object affect the size of a shadow?</p> <ol style="list-style-type: none"> Recognise that they need 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 their eyes. Notice that light is reflected from surfaces Recognise that shadows are formed when the light from a light source is blocked by an opaque object. 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. | <p>Plants A – Does the number of seeds within one plant pot affect the growth of the plants?</p> <ol 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. <p>Working Scientifically</p> | <p>Forces – How does the material on the ramp affect the distance a car travels? Magnets – Are all metals magnetic? Plants B - Does the number of seeds within one plant pot affect the growth of the plants? Biodiversity – What is biodiversity and how can we increase it?</p> <ol style="list-style-type: none"> Compare how things move on different surfaces. Notice that some forces need contact between 2 objects, but magnetic forces can act at a distance. |

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| | <p>make their own food; they get nutrition from what they eat.</p> <p>Working Scientifically</p> <ol style="list-style-type: none"> Asking relevant questions and using different types of scientific enquiry to answer them Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and labels Talk about criteria for grouping, sorting and classifying Using straightforward scientific evidence to answer questions or to support their findings. 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. | <ol style="list-style-type: none"> Asking relevant questions and using different types of scientific enquiries to answer them. Reporting findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. | <ol style="list-style-type: none"> Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables Using straightforward scientific evidence to answer questions or to support their findings. Setting up simple practical enquiries, comparative and fair tests. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions | <p>Working Scientifically</p> <ol style="list-style-type: none"> Identifying differences, similarities or changes related to simple scientific ideas and processes. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. Asking relevant questions and using different types of scientific enquiries to answer them. | <ol style="list-style-type: none"> Using straight forward scientific evidence to answer questions or to support their findings. Asking relevant questions and using different types of scientific enquiries to answer them. Setting up simple practical enquiries, comparative and fair tests Setting up simple practical enquiries, comparative and fair tests. Identifying differences, similarities or changes related to simple scientific ideas and processes. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. | <ol style="list-style-type: none"> 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 Observe how magnets attract or repel each other and attract some materials and not others Describe magnets as having 2 poles and predict whether 2 magnets will attract or repel each other, depending on which poles are facing. <p>Working Scientifically</p> <ol style="list-style-type: none"> 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. Setting up simple practical enquiries, comparative and fair tests Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. |
| | <p>Vocabulary: skeleton, skull, ribcage, spine, pelvis, femur, exoskeleton, joints Carbohydrates, proteins, dairy products, fats, sugars, balanced diet, balanced meal, nutrition, Eat well guides</p> | <p>Vocabulary: Granite, pumice, sandstone, chalk, marble, gneiss, crystals, grains, layers, texture, harness, float, sink, brittle, reaction, weathering</p> | <p>Vocabulary: Soil, organic matter, nutrients, habitat loss, deforestation, independent variable, dependant variable, controlled variable, absorb, conclusion, evaluation, data</p> | <p>Vocabulary: Light, light source, natural, artificial, reflection, opaque, translucent, shadow, transparent, distance</p> | <p>Vocabulary: Dissection, independent variable, dependent variable, controlled variable, water transportation, seedling, germination</p> | <p>Vocabulary: Push, pull, force, contact force, fiction, magnet, magnetic, magnetic force, attract, repel</p> |
| | <p>Prior Learning: Year 1 – Children are familiar with terms, mammal, bird, fish.</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> |
| <p>Year 4</p> | <p>Group and classify living things – How can living things be grouped and classified? Data collection A – What living things do we have in our local area and how does this change over the year?</p> <ol 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. <p>Working Scientifically</p> <ol style="list-style-type: none"> Asking relevant questions and using different types of scientific enquiries to answer them. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. | <p>States of matter – How does the temperature of water affect the time it takes for ice to melt?</p> <ol style="list-style-type: none"> Compare and group materials together, according to whether they are solids, liquids or gases. Observe that some materials change state when they are heated or cooled, and measure or 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. <p>Working Scientifically</p> <ol style="list-style-type: none"> Identifying differences, similarities or changes related to simple scientific ideas. Asking relevant questions and using different types of scientific enquiries to answer them. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Setting up simple practical, enquiries, comparative and fair tests. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. | <p>Sound – How does the distance from the sound source affect the volume of the sound? Data collection B - What living things do we have in our local area and how does this change over the year?</p> <ol style="list-style-type: none"> Identify sounds are made, associating some of them with something vibrating. Recognise that vibration from sounds travel through a medium to the ear Find patterns between the volume of a sound and the strength of the vibrations that produced it. Recognise that sounds get fainter as the distance from the sound source increases. <p>Working Scientifically</p> <ol style="list-style-type: none"> Asking relevant questions and using different types of scientific enquiries to answer them. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Setting up simple practical enquiries, comparative and fair tests. Identifying differences, similarities or changes related to simple scientific ideas and processes. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. | <p>Electricity – What materials are conductors or insulators of electricity and is there a pattern? Energy – How can we reduce the energy we use?</p> <ol style="list-style-type: none"> Identify common appliances that run on electricity Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. 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. <p>Working Scientifically</p> <ol style="list-style-type: none"> Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Asking relevant questions and using different types of scientific enquiries to answer them | <p>Data Collection C - What living things do we have in our local area and how does this change over the year? Habitats – What impacts do humans have on different habitats? Deforestation- What are the impacts of deforestation on the planet?</p> <ol style="list-style-type: none"> Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment Recognise that living things can be grouped in a variety of ways Recognise that environments can change, and that this can sometimes pose dangers to living things. <p>Working Scientifically</p> <ol style="list-style-type: none"> 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, keys, bar charts and tables Asking relevant questions and using different types of scientific enquiries to answer them. | <p>The digestive system – What is the digestive system and how does it work? Food chains – How has human activity affected food chains?</p> <ol style="list-style-type: none"> Comparing the teeth of carnivores and herbivores and suggesting reasons for differences Identify the different types of teeth in humans and their simple functions Describe the simple functions of the basic parts of the digestive system in humans. Construct and interpret a variety of food chains, identifying producers, predators and prey <p>Working Scientifically</p> <ol style="list-style-type: none"> Identifying differences, similarities or changes related to simple scientific ideas and processes. Asking relevant questions and using different types of scientific enquiries to answer them. Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations Setting up simple practical enquiries, comparative and fair tests. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. |
| | <p>Vocabulary: Exoskeleton, insect, spider, soft-bodied invertebrate,</p> | <p>Vocabulary: Solid, liquid, gas, volume, states of matter, pouring solid, volume, oobleck, flow, freezing, melting, boiling, condensation, evaporation, thermometer, temperature, precipitation, atmosphere, the water cycle,</p> | <p>Vocabulary: Vibration, ear, sound, volume, pitch, decibel, insulate, high-pitched, low-pitched, background noise</p> | <p>Vocabulary: Circuit, switch, cell, battery, buzzer, conductor, insulator, metal, material, electricity, battery-powered, renewable energy, non-renewable energy, appliance, energy usage</p> | <p>Vocabulary: Data, increase, decrease, compare, habitat, rural habitat, urban habitat, biodiversity, classification, deforestation, natural resources, deforestation, rewilding, natural reserve</p> | <p>Vocabulary: Teeth, incisors, canines, premolars, molars, germs, enamel, root, plaque, decay, digestive system, mouth, oesophagus, stomach, rectum, intestines, saliva, food chain, producer, predator, prey, consumer</p> |
| | <p>Prior Learning: Animals Yr1 & 2, Plants Yr1 & 2,</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> | <p>Prior Learning:</p> |

