



Year group	Autumn 1 Objectives	Autumn 2 Objectives	Spring 1 Objectives	Spring 2 Objectives	Summer 1 Objectives	Summer Objectives
Nursery A (2023-24)	<p>All about me</p> <ul style="list-style-type: none"> Talk about what they see, using a wide vocabulary. 	<p>Winter Wonderland</p> <ul style="list-style-type: none"> Explore and respond to different natural phenomena in their setting and on trips. Use all their senses in hands-on exploration of natural materials. Talk about what they see, using a wide vocabulary. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice. 	<p>People who help us</p> <ul style="list-style-type: none"> Talk about what they see, using a wide vocabulary. Show interest in different occupations. Explore how things work. 	<p>Nature Detectives</p> <ul style="list-style-type: none"> Explore materials with different properties. Explore natural materials, indoors and outside. Explore and respond to different natural phenomena in their setting and on trips. Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. 	<p>Let's go on Holiday</p> <ul style="list-style-type: none"> Explore and respond to different natural phenomena in their setting and on trips. Use all their senses in hands-on exploration of natural materials. Talk about what they see, using a wide vocabulary. Explore how things work. Explore and talk about different forces they can feel. 	<p>Under the Sea</p> <ul style="list-style-type: none"> Explore and respond to different natural phenomena in their setting and on trips. Use all their senses in hands-on exploration of natural materials. Talk about what they see, using a wide vocabulary. Explore how things work. Explore and talk about different forces they can feel.
Nursery B (2024-25)	<p>All about me</p> <ul style="list-style-type: none"> Talk about what they see, using a wide vocabulary. 	<p>Light and colour</p> <ul style="list-style-type: none"> I can talk about the natural world using words linked to my senses. I can begin to talk about the different seasons and changes that occur in them. I am beginning to investigate simple changes in materials e.g how to melt ice. 	<p>Superheroes/People who help us</p> <ul style="list-style-type: none"> Talk about what they see, using a wide vocabulary. Show interest in different occupations. Explore how things work. 	<p>On the farm</p> <ul style="list-style-type: none"> Talk about the differences between materials and changes they notice. Explore how things work. Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary Explore and respond to different natural phenomena in their setting and on trips. Explore natural materials, indoors and outside. 	<p>Mini beasts</p> <ul style="list-style-type: none"> Talk about the differences between materials and changes they notice. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Explore how things work. Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary Explore and respond to different natural phenomena in their setting and on trips. Explore natural materials, indoors and outside. 	<p>Journeys</p> <ul style="list-style-type: none"> Explore and talk about different forces they can feel. Explore how things work. Show interest in different occupations. Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary
Reception	<p>It's good to be me!</p>	<p>Dinosaurs</p> <ul style="list-style-type: none"> Explore the natural world around them. Describe what they see, hear and feel whilst outside. Explore the natural world around them, making 	<p>Dinosaurs</p> <ul style="list-style-type: none"> Explore the natural world around them. Describe what they see, hear and feel whilst outside. Explore the natural world around them, making 	<p>Up, up and away!</p> <ul style="list-style-type: none"> Describe what they see, hear and feel whilst outside. Recognise some environments that are different to the one in which they live. 	<p>Growing</p> <ul style="list-style-type: none"> Explore the natural world around them. Describe what they see, hear and feel whilst outside. Recognise some environments that are 	<p>The great outdoors</p> <ul style="list-style-type: none"> Explore the natural world around them. Describe what they see, hear and feel whilst outside. Recognise some environments that are

		observations and drawing pictures of animals and plants. (ELG)	observations and drawing pictures of animals and plants. (ELG)	<ul style="list-style-type: none"> • Understand the effect of changing seasons on the natural world around them. o Explore the natural world around them, making observations and drawing pictures of animals and plants. (ELG) o Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. (ELG) o Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. (ELG) 	<p>different to the one in which they live.</p> <ul style="list-style-type: none"> • Understand the effect of changing seasons on the natural world around them. o Explore the natural world around them, making observations and drawing pictures of animals and plants. (ELG) o Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. (ELG) o Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. (ELG) 	<p>different to the one in which they live.</p> <ul style="list-style-type: none"> • Understand the effect of changing seasons on the natural world around them. o Explore the natural world around them, making observations and drawing pictures of animals and plants. (ELG) o Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. (ELG) o Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. (ELG)
1	<p>Plants and animals where we live <i>Cross-curricular links to topic</i></p> <ol style="list-style-type: none"> 1. Which Plants and Animals Live Here?: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. <i>Observe closely, using simple equipment.</i> 2. Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. <i>Use their observations and ideas to suggest answers to questions.</i> 3. Identify and describe the basic structure of a variety of common flowering plants, including trees. <i>Ask simple questions and recognise that they can be answered in different ways.</i> 4. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. 	<p>Celebrations <i>Stand alone</i></p> <ol style="list-style-type: none"> 1. Introducing Candles: Say which part of the body is associated with each sense. <i>Identify and classify.</i> 2. Shadow shapes: <i>Perform simple tests.</i> 3. Make a Shadow Puppet: Distinguish between an object and the material from which it is made. <i>Use observations and ideas to suggest answers to questions.</i> 4. Kazoo: Describe the simple physical properties of a variety of everyday materials. <i>Observe things using simple equipment.</i> 5. Which Part of the Plant is it?: Identify and describe the basic structure of a variety of common flowering plants, including trees. 	<p>Polar places <i>Stand alone</i></p> <ol style="list-style-type: none"> 1. Polar Places: <i>Identify and classify.</i> 2. What do we need? Planning a Polar Adventure: Describe the simple physical properties of a variety of everyday materials. 3. How Will We Get There?: <i>Ask simple questions and recognise that they can be answered in different ways.</i> 4. Which Material?: Compare and group together a variety of everyday materials on the basis of their simple physical properties. 5. Adopt an Animal: 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). 6. Am I a Herbivore, Carnivore or Omnivore?: Identify and name a variety of common 	<p>On Safari <i>Stand alone</i></p> <ol style="list-style-type: none"> 1. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. <i>Identify and classify.</i> 2. Organising Safari Rucksacks: <i>Observe closely, using simple equipment.</i> 3. We are going on Safari!: <i>Identify and classify.</i> 4. Observing Invertebrates: Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). 5. Asking Questions: <i>Ask simple questions and recognise that they can be answered in different ways.</i> 6. Answering Our Questions: <i>Ask simple questions and recognise that they can be answered in different ways.</i> 6. 	<p>Holiday <i>Cross-curricular links to topic</i></p> <ol style="list-style-type: none"> 1. Packing a case: Distinguish between an object and the material from which it is made. Compare and group together a variety of everyday materials on the basis of their simple physical properties. 2. Sun Safety: Observe closely, using simple equipment. 3. Sunglasses: Describe the simple physical properties of a variety of everyday materials. <i>Perform simple tests. Use observations and ideas to suggest answers to questions.</i> 4. Marine Biologist: <i>Gather and record data to help in answering questions.</i> 5. Identify and Classify Seashore Animals: 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, 	<p>Who am I? <i>Stand alone</i></p> <ol style="list-style-type: none"> 1. My Body Apron: Identify, name, draw and label the basic parts of the human body 2. Smell Table: Say which part of the body is associated with each sense. 3. What's that taste?: <i>Identify and classify.</i> 4. My eyes: <i>Gather and record data to help in answering questions.</i> 5. Match the Sound: <i>Observe closely, using simple equipment.</i> 6. Using My Hands: Identify, name, draw and label the basic parts of the human body. Say which part of the body is associated with each sense.

	<p>5. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). <i>Gather and record data to help in answering questions.</i></p> <p>6. Identify and name a variety of common animals that are carnivores, herbivores and omnivores. <i>Identify and classify.</i></p>		<p>animals that are carnivores, herbivores and omnivores.</p> <p>7. Soup: <i>Use their observations and ideas to suggest answers to questions.</i></p>		<p>amphibians, reptiles, birds and mammals, including pets).</p> <p>6. Messy Humans: Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</p>
2	<p><u>Our local environment</u> <i>Stand alone</i></p> <p>1. Living or Not? Explore and compare the differences between things that are living, dead and things that have never been alive.</p> <p>2. Explore!: Explore and compare the differences between things that are living, dead and things that have never been alive.</p> <p>3. My Habitat: 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>4. Micro-Habitat Survey: Identify and name a variety of plants and animals in their habitats, including micro-habitats. <i>Gather and record data to help in answering questions.</i></p> <p>5. Food Chain Pairs: Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name the different sources of food.</p> <p>6. Extending the Food Chain: Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and</p>	<p><u>Healthy me</u> <i>Cross-curricular links to topic</i></p> <p>1. What Makes Me Happy?: Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</p> <p>2. How Do We Like To Keep Fit?: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p>3. How Does Exercise Help Me?: <i>Gather and record data to help answer questions.</i></p> <p>4. Design, Make and Test a Helmet: <i>Observe closely, using simple equipment. Use their observations and ideas to suggest answers to questions.</i></p> <p>5. Why Do We Need Food?: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p>6. Spraying Germs and/or Snot Trail: <i>Perform simple test.</i></p>	<p><u>Materials monster</u> <i>Stand alone</i></p> <p>1. Feeding Time: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>2. Sorting For Materials Monster: <i>Identify and classify.</i></p> <p>3. Talk to Materials Monster: <i>Observe closely, using simple equipment.</i></p> <p>4. Taking Materials Monster Outside: <i>Observe closely, using simple equipment.</i></p> <p>5. Silly Materials Monster Book: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>6. Squash, Bend, Twist, Stretch: Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. <i>Perform a simple test.</i></p>	<p><u>Squash, bend, twist and stretch</u> <i>Stand alone</i></p> <p>1. Flexible Me: Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>2. Squash Me, Bend Me, Twist Me, Stretch Me: Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>3. Sort Me: <i>Identify and classify.</i></p> <p>4. Stretchy Socks: <i>Perform simple tests.</i></p> <p>5. Flying Mouse: <i>Gather and record data to help answer questions.</i></p>	<p><u>Young gardeners</u> <i>Stand alone</i></p> <p>1. What is Growing in Our School Grounds?: Identify and name a variety of plants and animals in their habitats, including microhabitats. <i>Identify and classify using simple equipment.</i></p> <p>2. What Shall We Grow?: <i>Observe and describe how seeds and bulbs grow into mature plants. Ask simple questions and recognise that they can be answered in different ways.</i></p> <p>3. What Do Seeds Need For Germination?: Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. <i>Perform simple tests and use observations and ideas to suggest answers to questions.</i></p> <p>4. What Do Plants Need to Grow?: <i>Observe closely, using simple equipment.</i></p> <p>5. Grow a Salad: <i>Gather and record data to help answer questions.</i></p>

	identify and name the different sources of food.					
3	<p><u>Light and shadows</u> <i>Stand alone</i></p> <ol style="list-style-type: none"> Sources of Light: Recognise that they need light in order to see things and that dark is the absence of light. Darkness Box: Set up simple practical enquiries, comparative and fair tests. Shiny and Dull: Notice that light is reflected from surfaces. Finding Out About Mirrors: Notice that light is reflected from surfaces. Concave and Convex Mirrors: <i>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</i> Which Material Is Best For Making Shadows?: <i>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment including thermometers and data loggers.</i> Exploring My Shadow: Find patterns in the way that the sizes of shadows change. 	<p><u>Forces and magnets</u> <i>Stand alone</i></p> <ol style="list-style-type: none"> Pushes and Pulls: Compare how things move on different surfaces. Moving Things on Different Surfaces: <i>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment including thermometers and data loggers. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</i> Which Magnet is the Strongest?: 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. Magnetism: Notice that some forces need contact between two objects, but magnetic forces can act at a distance. <i>Set up simple practical enquiries, comparative and fair tests.</i> North and South Poles: Describe magnets as having two poles. Fun Magnetic Games: Predict whether two magnets will attract or repel each other, depending on which poles are facing. Observe how magnets attract or repel each other and attract some materials and not others. 	<p><u>Food and our bodies</u> <i>Stand alone</i></p> <ol style="list-style-type: none"> What Do Humans and Other Animals Need to Live?: Identify that animals, including humans, need the right types and amounts of nutrition, and that they cannot make their own food, they get nutrition from what they eat. Food Groups: <i>Gather, record, classify and present data in a variety of ways to help in answering questions.</i> Our Skeletons: Identify that humans and some other animals have skeletons and muscles for support, protection and movement. Protecting the Brain: Identify that humans and some other animals have skeletons and muscles for support, protection and movement. Broken Bone Survey: <i>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.</i> Muscles: Identify that humans and some other animals have skeletons and muscles for support, protection and movement. Getting to Know Joints: <i>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</i> 	<p><u>How does your garden grow?</u> <i>Stand alone</i></p> <ol style="list-style-type: none"> Parts of a Plant: Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. Grow a Seed: Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. How is Water Transported in a Plant?: Investigate the way in which water is transported within plants. How Much Water Do Plants Need To Be Healthy?: Explain 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. <i>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.</i> What Is Pollination?: Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. Parts of a Flower: Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. How Do These Seeds Spread? <i>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</i> 	<p><u>Rocks, soils and fossils</u> <i>Stand alone</i></p> <ol style="list-style-type: none"> Sorting Rocks: <i>Gather, record, classify and present data in a variety of ways to help answer questions.</i> Being a Geologist: Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Being a Geologist: Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Permeable or Impermeable?: <i>Set up simple practical enquiries, comparative and fair tests.</i> What is Soil?: Recognise that soils are made from rock and organic matter. Looking at Fossils: Describe in simple terms how fossils are formed when things that have lived are trapped within rock. Asking Questions About Fossils?: <i>Ask relevant questions and use different types of scientific enquiries to answer them.</i> 	
4	<p><u>What's that sound?</u> <i>Stand alone</i></p> <ol style="list-style-type: none"> Sources of Sound: Identify how sounds are made, associating some of them with something vibrating. 	<p><u>Looking at states</u> <i>Stand alone</i></p> <ol style="list-style-type: none"> In a State: Compare and group materials together, according to whether they are solids, liquids or gases. 	<p><u>Teeth and eating</u> <i>Cross-curricular links to DT</i></p> <ol style="list-style-type: none"> First Impressions: <i>Ask relevant questions and use different types of scientific enquiries to answer them.</i> 	<p><u>Living things</u> <i>Stand alone</i></p> <ol style="list-style-type: none"> Sort Me: Recognise that living things can be grouped in a variety of ways. 	<p><u>Power it up</u> <i>Cross-curricular links to DT</i></p> <ol style="list-style-type: none"> Which source?: Identify common appliances that run on electricity. 	<p><u>The big build</u> <i>Stand alone</i></p> <ol style="list-style-type: none"> Bridging A Stream: <i>Set up simple practical enquiries, comparative and fair tests.</i>

	<p>2. Feeling and Seeing the Vibrations: <i>Set up simple practical enquiries, comparative and fair tests. Use straightforward scientific evidence to answer questions or to support their findings.</i></p> <p>3. Percussion Sounds: Find patterns between the volume of a sound and the strength of the vibrations that produced it.</p> <p>4. Glass Bottle Orchestra: Find patterns between the pitch of a sound and features of the object that produced it.</p> <p>5. How Far Away Can You Hear It? Recognise that sounds get fainter as the distance from the sound source increases.</p> <p>6. Measuring Sound: <i>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</i></p> <p>7. Sounds Travelling Through Different Materials: Recognise that vibrations from sounds travel through a medium to the ear.</p> <p>8. Ear Gongs: <i>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</i></p>	<p>2. Ice Hands: 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). <i>Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</i></p> <p>3. Freezing: Identify differences, similarities or changes related to simple scientific ideas and processes. <i>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.</i></p> <p>4. Evaporation: <i>Set up simple practical enquiries, comparative and fair tests.</i></p> <p>5. The Water Cycle: Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>	<p>2. My Teeth: Identify the different types of teeth in humans and their simple functions.</p> <p>3. Looking After Our Teeth: <i>Set up simple practical enquiries, comparative and fair tests. Gather, record, classify and present data in a variety of ways to help answer questions.</i></p> <p>4. Food's Incredible Journey: Describe the simple functions of the basic parts of the digestive system in humans.</p> <p>5. Let's Make a Digestive System!: Describe the simple functions of the basic parts of the digestive system in humans.</p> <p>6. A Chain Reaction: Construct and interpret a variety of food chains, identifying producers, predators and prey.</p>	<p>2. Using Classification Keys: Recognise that living things can be grouped in a variety of ways.</p> <p>3. Vertebrates and Invertebrates: Recognise that living things can be grouped in a variety of ways.</p> <p>4. Classifying Leaves: Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</p> <p>5. Bees – Friends of Foes?: Recognise that environments can change and that this can sometimes pose dangers to living things.</p> <p>6. 'Bee' Fantastic – Save Our Bees: <i>Use straightforward scientific evidence to answer questions or to support their findings.</i></p> <p>7. Spreading the Word: <i>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</i></p>	<p>2. Using Electricity Safely: Pupils should be taught about precautions for working safely with electricity.</p> <p>3. Simple Circuits: 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>4. Switches: 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>5. Conductors: Recognise some common conductors and insulators, and associate metals with being good conductors. <i>Use straightforward scientific evidence to answer questions or to support their findings.</i></p> <p>6. What Can You Make Using Circuits?: Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</p>	<p>2. Which Shape is the Strongest for Bridge Pillars?: <i>Make systematic and careful observations and, where appropriate, take accurate measurements using a range of equipment, including thermometers and data loggers. Gather, recording, classifying and presenting data in a variety of ways to help answer questions.</i></p> <p>3. Terrific Triangles: <i>Use straightforward scientific evidence to answer questions or to support their findings.</i></p> <p>4. Tallest Tower: <i>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.</i></p> <p>5. Spaghetti Towers: <i>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</i></p> <p>6. Animal Homes: 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>
5	<p>Amazing changes <i>Stand alone</i></p> <p>1. Elephant toothpaste: Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p> <p>2. Inflating a Balloon: <i>Use test results to make predictions to set up further comparative and fair tests.</i></p>	<p>Out of this world <i>Stand alone</i></p> <p>1. The Solar System: Describe the movement of the Earth and other planets relative to the Sun in the Solar System.</p> <p>2. What is at the Centre of the Solar System?: Describe the Sun, Earth and Moon as approximately spherical bodies.</p> <p>3. Copernicus and Galileo: <i>Identify scientific evidence that has been used to</i></p>	<p>Let's get moving <i>Stand alone</i></p> <p>1. Investigating Gravity: Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>2. Galileo and Newton: <i>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</i></p>	<p>Material world <i>Stand alone</i></p> <p>1. Sorting Material: Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets.</p> <p>2. Testing Materials – Which Material Makes the Strongest Carrier Bag?: Give reasons, based on</p>	<p>Circle of life <i>Stand alone</i></p> <p>1. Plant Reproduction: <i>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</i></p> <p>2. Plants from Cuttings: Describe the life process of</p>	<p>Growing up and growing old <i>Cross-curricular links to RSE</i></p> <p>1. Growing Up: Describe the changes as humans develop to old age.</p> <p>2. How Does a Baby Develop?: Describe the changes as humans develop to old age.</p> <p>3. Gestation Periods for Different Animals: Describe the changes as humans develop to old age.</p>

	<p>3. Making Plastic: <i>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</i></p> <p>4. Burning: Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. (This will need to be adult led, outside of the building)</p> <p>5. New Materials: Identify scientific evidence that has been used to support or refute ideas or arguments.</p>	<p><i>support or refute ideas or arguments.</i></p> <p>4. Explaining Day and Night: Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky.</p> <p>5. What is a Time Zone?: <i>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</i></p> <p>6. Biscuit Moons: Describe the movement of the Moon relative to the Earth.</p> <p>7. Moon Craters Investigation: <i>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</i></p>	<p><i>Use test results to make predictions to set up further comparative and fair tests.</i></p> <p>3. Parachutes: Identify the effects of air resistance, water resistance and friction, that act between moving surfaces. <i>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms.</i></p> <p>4. What is Friction? Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.</p> <p>5. Force of Water: <i>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Use test results to make predictions to set up further comparative and fair tests.</i></p> <p>6. Make a Simple See-saw – A Lever: Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p>7. Using Pulleys: <i>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</i></p> <p>8. Gears: Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p>	<p>evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. <i>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</i></p> <p>3. Testing Materials – Which Materials are Thermal Conductors and which are Thermal Insulators?: <i>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</i></p> <p>4. Searching for a Solution: Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.</p> <p>5. Sieving & Filtering: Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</p> <p>6. Evaporating: <i>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</i></p> <p>7. Growing Crystals: <i>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</i></p>	<p>reproduction in some plants and animals.</p> <p>3. Bird Life Cycles: Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p>4. Butterfly Life Cycle: Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p>5. Life Cycle of a Frog: Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p>6. Why do some Animals Lay so Many Eggs?: <i>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</i></p> <p>7. Endangered Animals: <i>Identify scientific evidence that has been used to support or refute ideas or arguments.</i></p>	<p>4. How do we change?: Describe the changes as humans develop to old age.</p> <p>5. Being a Teenager: Describe the changes as humans develop to old age.</p> <p>6. How Old is Old?: <i>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</i></p> <p>7. Live Forever: <i>Identify scientific evidence that has been used to support or refute ideas or arguments.</i></p>
6	<p>Light <i>Stand alone</i></p> <p>1. How Does Light Travel? & Introduction to Puppets: Recognise that light appears to travel in straight lines.</p>	<p>Electricity <i>Stand alone</i></p> <p>1. It's Faulty: Use recognised symbols when representing a simple circuit in a diagram.</p>	<p>Classifying living things <i>Stand alone</i></p> <p>1. Quick Classifications: Give reasons for classifying plants and animals based on specific characteristics.</p>	<p>Evolution and inheritance <i>Stand alone</i></p> <p>1. Life on Earth Timeline: Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</p>		<p>Healthy bodies <i>Cross-curricular links to topic</i></p> <p>1. What do you Want to Know?: Identify and name the main parts of the human circulatory system, and</p>

	<p><i>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</i></p> <ol style="list-style-type: none"> 2. Pattern Seeking from Shadows: Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. <i>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</i> 3. Mirror Image & Seeing is Believing: 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. 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. 4. Observing the Unexpected: <i>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</i> 5. Rainbows: <i>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</i> 	<ol style="list-style-type: none"> 2. How Bright?: Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. 3. Changing Light, Sound and Movement: 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. 4. Games Galore (2 lessons needed): Use recognised symbols when representing a simple circuit in a diagram. 5. Games Galore (2 lessons needed): Use recognised symbols when representing a simple circuit in a diagram. 6. Electricity Past and Present: <i>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</i> 	<ol style="list-style-type: none"> 2. Classifying the Local Environment: Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. 3. Carl Linnaeus: <i>Identify scientific evidence that has been used to support or refute ideas or arguments.</i> 4. Bacteria: Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals. 5. Fabulous Fungi: <i>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</i> 	<ol style="list-style-type: none"> 2. Fossil and Mary Anning: Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. 3. Guess Who: Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. <i>Identify scientific evidence that has been used to support or refute ideas or arguments.</i> 4. Adaptations: Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. 5. How Have They Changed?: Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. 6. Natural Selection: <i>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</i> 	<p>describe the functions of the heart, blood vessels and blood.</p> <ol style="list-style-type: none"> 2. What do you know?: Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. 3. Changes in Heart and Breathing Rate: <i>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. Use test results to make predictions to set up further comparative and fair tests.</i> 4. Lung Capacity: <i>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</i> 5. Diet: Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. 6. What is a Drug?: Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. 7. Cigarettes and Alcohol: Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.
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