



Science Curriculum – Year 1 and 2 – Cycle B

Non- Negotiables - Working Scientifically

Year 1	<ul style="list-style-type: none"> ask simple questions observe closely using simple equipment perform simple comparative tests identify, sort, group and classify use my observations to help me suggest answers to questions with guidance, begin to notice patterns and relationships observe simple changes over time find information using simple secondary sources 					
Year 2	<ul style="list-style-type: none"> ask simple questions and recognise they can be answered in different ways observe closely using simple equipment perform simple comparative tests identify, sort, group and classify use my observations to help me suggest answers to questions gather and record simple data to help me answer questions with guidance, begin to notice patterns and relationships use simple secondary sources observe changes over time communicate ideas in a variety of ways 					
	Autumn		Spring		Summer	
	“What makes me unique?”	“What makes the best toy ever?”	“How would Bear Grylls survive in Antarctica?”	“How is my life different to an African child?”	“Where does a butterfly come from?”	What would make the perfect seaside?
Hierarchies	<p>Understand Animals Including Humans</p> <p>B9: Notice that animals, including humans, have offspring which grow into adults.</p> <p>B10: Investigate and describe the basic needs of animals, including humans, for survival (water, food and air).</p> <p>Understand Evolution and Inheritance</p> <p>B16: Identify how humans resemble their parents in many features.</p>	<p>Understanding Movement, Forces and Magnets</p> <p>P1: Notice and describe how things move, using simple comparisons such as faster and slower. Compare how different things move.</p> <p>Understand Electrical Circuits</p> <p>P4: Identify common appliances that run on electricity.</p> <p>P5: Construct a simple series electrical circuit.</p>	<p>Understand the Earth’s Movement in Space</p> <p>P6: Observe the apparent movement of the Sun during the day.</p> <p>P7: Observe changes across the four seasons.</p> <p>P8: Observe and describe weather associated with the seasons and how day length varies.</p>	<p>Investigate living Things</p> <p>B12: Explore and compare the differences between things that are living, that are dead and that have never been alive.</p> <p>B13: 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>B14: Identify and name a variety of plants and animals in their habitats, including micro-habitats.</p> <p>B15: 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.</p>	<p>Understanding Plants</p> <p>B3: Observe and describe how seeds and bulbs grow into plants</p> <p>Understanding animals including humans</p> <p>B9: Notice that animals, including humans, have offspring which grow into adults.</p> <p>B12: Explore and compare the differences between things that are living, that are dead and that have never been alive.</p> <p>B13: 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>Investigate Materials</p> <p>C2: Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</p> <p>C3: Describe the simple physical properties of a variety of everyday materials.</p> <p>C4: Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>C3: Describe the simple physical properties of a variety of everyday materials.</p> <p>C4: Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>C6: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock, and paper/cardboard for particular uses.</p>
Resources	<p>Washing Hands Rhyme (FSD? activity only) • Equipment: basins of cold water/cooking oil/glitter or cinnamon/paper towels (FSD? activity only)</p>	<p>Grandpa’s surprise by Rosalind Beardshaw), Mrs Armitage Queen of the Road by Quentin Blake or similar. “The Wind Blew” By Pat Hutchins, “The Sun and the Wind” Aesop’s fable – natural forces, 2 large hoops. Objects to sort into push, pull or push & pull e.g. spinning top, wind-up toy, Lego™, car, ball, pull along toy, elastic band, skipping rope, board rubber, pen, comb, paper clip, sticky tape. Straws & ping pong balls. Different activities with an emphasis on pushing & pulling e.g. Play dough, Lego™, toys cars, magnetic trains, etc. A ball for each child. A bat between each pair of children. balance bikes. Toy diggers in sand/soil. Topic books with pictures of vehicles, diggers, tractors, trains etc. Small world play with an emphasis on forces. Magnets (selection), range of games which use magnets, appliances that use mains electricity, batteries or both, e.g. CD player, mobile phone, watch, calculator, kettle, laptop, electric pencil sharpener, TV remote control, torch, moving toy, pictures of larger appliances, etc. 2 large hoops and labels for Venn diagram. Bulbs, bulb holders, batteries/cells, insulated wires, battery holders, buzzers, motors, crocodile clips and wires (chn should not use rechargeable batteries as they can get hot).</p>	<p>Inflatable Earth, weather symbols, calendars,</p>	<p>Trays/bags for collecting objects, topic books – animals native to Africa, images of animals native to Africa,</p>	<p>topic books about life cycles. Book about life cycles as ‘Are you a ladybird?’ Allen and Humphries, Life cycles - Frog by L Spilbury, Is that a frog? by C Llewellyn and A Parker, Growing Frogs by V French and A Bartlett. Amphibians by R Theodorou, Watch it Grow – Frog by B Watts, Oscar and the Frog by Geoff Waring. ‘Life Cycle of a Sunflower’ by Angela Royston, Soft paintbrushes, containers. Plastic models of mini-beasts. Compost in a tray, Stones, leaves, wood for different habitats. Paper, scissors and glue sticks. Sunflower seeds (2 per child). Sunflower head with seeds. Nature area (if available), Paper for zigzag book. Tanks etc for keeping tadpoles, Set of plastic minibeasts, life cycle topic books, string, scissors, thin black pens. Compost in a tray, plastic minibeasts to play with. Stones, leaves, wood for different habitats. collection of seeds that grow into trees (e.g. apple pips, acorns, seeds out of pine cones, conkers). cross section of a tree trunk, a tree seedling, plasticine, tape measures, different types of apples.</p>	<p>Collection of objects found/taken at the seaside, sand, wood, plastic,</p>
Vocabula	<p>Human, grow, old, young, survive, breathe, eat, drink, bacteria, germs, hygiene, medicine, drugs, tablets, pills,</p>	<p>Force, push, pull, twist, direction, gravity, friction, magnet, magnetic, attract, repel, predict, appliance, electricity</p>	<p>Sun, moon, Earth, season, Autumn, Summer, Winter, Spring, month, year</p>	<p>Living, alive, dead, habitat, names of creatures and their young being studied,</p>	<p>Life-cycle, young, adult, egg, nymph, larva, chrysalis, pupae, nymph, min-beast, insect, roots, stem, flower and leaves, plant names,</p>	<p>Materials, wood, plastic, glass, rock, hard, soft, light, heavy, clear, opaque,</p>

Lesson 1	<p>Year 1/2: To explore how humans grow as they get older.</p> <p>Activities: Children will learn about ways in which the body grows over time, then either describe some changes in their own words, or conduct a height investigation.</p> <p>Outcomes: Year 1/2: Children know that humans grow as they get older • Children know that body parts will grow in proportion • Children describe the stages of human development</p>	<p>Year 1/2: To understand that a force makes things move.</p> <p>Activities: Ask for child to move the toy car. Introduce topic using a suitable story (suggestion above). Group activity Using 2 large hoops to make a Venn diagram, help children sort objects by which force is needed to move them or use them e.g. spinning top, wind-up toy, Lego™, car, ball, pull along toy, elastic band, skipping rope, board rubber, pen, comb, paper clip, sticky tape, etc. Ask Is it a push, a pull or a push and pull? Record individually or as a class/group as appropriate Children explore different practical activities as available with an emphasis on pushing and pulling, e.g. a) Play dough b) Lego™ c) Using straws to blow ping pong balls around a tray d) Toy cars on road map and/or different surfaces e) Magnetic trains</p> <p>Outcomes: Year 1: Children ask questions and think how we might answer them. Children find out about, and describe the movement of familiar things. Children know that a force makes things move. Children know that both pushes and pulls are examples of forces. Year 2: Children know that a force makes things move. Children know that both pushes and pulls are examples of forces. Children use simple scientific language to communicate ideas about phenomena and processes.</p>	<p>Year 1: To find out about different seasons and how to describe them.</p> <p>Year 2: Activities: Children will describe the weather they can directly observe and other types of weather they know of. They will describe what the weather is normally like during different seasons, and what people might wear in different weather conditions.</p> <p>Outcomes: Year 1/2: Children name the seasons • Children know that weather changes for each season • Children know that weather affects human activity</p>	<p>Year 1/2: To be able to identify things that are living, things that are dead and things that have never been alive.</p> <p>Activity: Children will begin to identify some life processes which indicate that animals and plants are alive. They will then identify and sort objects and organisms into group: living and non-living things.</p> <p>Outcomes: Year 1: Children identify living things • Children identify living things that have died • Children identify things that have never been alive</p>	<p>Year 1/2: To understand that animals have a life cycle.</p> <p>Activities: Read book about life cycle of a ladybird such as 'Are you a ladybird?' Introduce the term 'life cycle' children to help you draw a diagram of what happens in the book. Taking suggestions from the chn on f/c draw eggs on leaf, then an arrow to picture larvae, larva growing, pupa, pupa hatching, and ladybird and explain how it all starts again. If possible collect ladybirds in advance or go on a ladybird hunt and collect ladybirds, ladybird larvae, (or other beetles) to look at and draw. Talk about how to handle small creatures. Use a soft paintbrush to pick them up and put them in a container. Use plastic models as an alternative. In a small group look carefully at ladybird with hand lenses. Demonstrate how to use lens. Ask What do you notice about the ladybird? How many legs does it have? Do you think it has wings? Where are the wings? Where does it live? What does it eat?</p> <p>Outcomes: Year 1: Children will know how to treat living creatures with care. Children will understand that animals have a life cycle. Children will know that humans and other animals can produce offspring and that these offspring grow into adults. Year 2: Children will know how to treat living creatures with sensitivity and care. Children will understand that animals have a life cycle. Children will know that humans and other animals can produce offspring and that these offspring grow into adults. Children will use simple scientific language to communicate ideas and to name and describe living things, materials, phenomena and processes.</p>	<p>Year 1/2: To be able to identify a variety of common materials</p> <p>Activities: Children will learn what different materials are. They will name seaside objects while thinking about the material they are made from and their properties. The children will be encouraged to group the objects in a variety of ways</p> <p>Outcomes: Year 1/2: Children know what a material is • Children identify a variety of common materials • Children describe what different materials feel like</p>
Lesson 2	<p>Year 1/2: To find out what animals, including humans, need to survive.</p> <p>Activities: Children will think about what our bodies can do. What are the basic needs of animals, such as eating, drinking and breathing. They will consider how these needs vary between species, then explain the needs of various animals in their own words. Could explore differences in shoe size between children.</p> <p>Outcomes: Year 1/2:• Children know that all animals, including humans, need food to survive • Children know that all animals, including humans, need water to survive • Children know that all animals, including humans, need air to survive</p>	<p>Year 1/2: To understand that forces can make things speed up and change direction.</p> <p>Activities: Demonstrate bouncing ball - increasing the force each time. What happens when I increase the force? Which force am I using? Children explore freely. Explain that you are pushing the ball to the ground and the ground is pushing back, changing the direction of the ball. This time throw the ball up in the air. Tell them you are using a push to throw the ball up. Ask What is pulling the ball back down? One child rolling the ball towards the other child holding the bat. Ask What do you think will happen when the ball hits the bat? It changes direction. Make up own games if time. Explore pushes and pulls online game. Write up game/label push and pulls – changing direction/speeding up.</p> <p>Outcomes: Year 1/2: Children find out about, and describe the movement of familiar things (for example, cars going faster, slowing down, changing direction). Children know that both pushes and pulls are examples of forces.</p>	<p>Year 1/2: To find out about the seasons and how they are different.</p> <p>Activities: Outcomes: Children will study images, looking for clues as to which season it is – including weather conditions and plant growth. Year 1/2: Children can identify the seasons • Children can say how the seasons differ • Children know the features of each of the seasons</p>	<p>Year 1/2: To understand that living things need to live in suitable habitats.</p> <p>Activities: Children will learn about what a habitat is, and what animals and plants need to survive in them. They will then identify and group animals by their habitats.</p> <p>Year 1/2: • Children know what a habitat is • Children know that animals and plants need to live in habitats they are suited to • Children match animals and plants to suitable habitats</p>	<p>Year 1: To know about the life cycle of a butterfly</p> <p>Year 2: To be able to explain the life cycle of a butterfly</p> <p>Activities: Recap last week. Read “The Very Hungry Caterpillar”. Which bits are based on fact and which bits are not true? What do they think caterpillars really eat? Do they really turn into butterflies? Ask children to describe to you how the caterpillar changes. Compare fiction/non-fiction. Children draw a picture of an egg, caterpillar, chrysalis and butterfly. They use arrows to link each stage and label each drawing.</p> <p>Outcomes: Year 1: Children will be able to talk about the life cycle of a butterfly. Children will say why and how storybooks and information books are different. Year 2: Children will be able to explain clearly the life cycle of a butterfly. Children will say why and how storybooks and information books are different.</p>	<p>Year 1/2: To explore wooden objects and their properties.</p> <p>Activities: Children will explore and describe the material wood and identify different things it is used for. They will develop their scientific thinking skills when asking and answering questions about wooden seaside objects.</p> <p>Outcomes: Year 1/2: Children identify a variety of common materials • Children describe the material wood • Children talk about the properties of wood relating to its purpose</p>

		Children recognise that when things change direction, there is a cause.				
Lesson 3	<p>Year 1: To understand the importance of medicines.</p> <p>Year 2: To understand the role of drugs as medicines.</p> <p>Activities: Introduce children to the concept that medicines are drugs designed to keep us well and help us get better. <u>Who needs medicines?</u> - We all do. <u>Who gives us medicines?</u> Draw around a child on large piece of paper - list all the things we take into our bodies and write inside. Highlight the aspects that make our bodies better if we are hurt or ill. Show variety of medicine boxes and bottles. <u>What are the clues that show us they could be dangerous?</u> Sort items into medicines and sweets. Discuss unlabelled bottles</p> <p>Outcomes:</p> <p>Year 1: Children understand that medicines are drugs that can keep us well and help us get better. Children can talk about the dangers of medicines.</p> <p>Year 2: To understand about the role of drugs as medicines. To understand there are hazards in materials, take-action to reduce risks to themselves and others.</p>	<p>Year 1/2: To understand that forces can make things slow down.</p> <p>Activities: look at bicycle/tricycle – talk about the forces involved in riding a bike. Introduce the word ‘friction’ - a type of force that happens when two things rub together. Talk about other examples of friction (look at shoe soles, talk about tyres, football boots, a ball rolling on sand, grass, tarmac and so on. Encourage children to discuss a range of pictures (<i>session resources</i>). Help the children to identify forces and use correct vocabulary. Explore forces by using toy diggers in sand/soil. Careful observational drawing of bicycle/tricycle. Colour and label picture of bicycle. Use topic books with pictures of vehicles, diggers, tractors, trains, etc. Look for use of forces and draw pictures. Small world play with an emphasis on forces. Ride Balance bikes. Think and talk about friction</p> <p>Outcomes:</p> <p>Year 1: Children find out about, and describe the movement of familiar things (for example, cars going faster, slowing down, changing direction). Children know that both pushes and pulls are examples of forces. Children understand that forces can make things slow down.</p> <p>Year 2: Children find out about, and describe the movement of familiar things (for example, cars going faster, slowing down, changing direction). Children know that both pushes and pulls are examples of forces. Children understand that forces can make things slow down. Children begin to look at the part science has played in the development of many useful things.</p>	<p>Year 1/2: To find out about how animals are affected by the seasons.</p> <p>Activities: Children will consider ways in which the changing conditions of the seasons affect the lives of animals, focussing on the behaviour of robins during each season. They may either undertake sequencing activities, or work in groups to learn about behaviours of other animals.</p> <p>Outcomes:</p> <p>Year 1: Children say how the seasons differ • Children say how the different seasons affect animal behaviour • Children explain the terms ‘adapt’ and ‘hibernate’</p>	<p>Year 1/2: To explore the plants and animals that live in seaside habitats.</p> <p>Activities: Children will identify features of seaside habitats and discuss which plants and animals might live in it, and where. They may then either identify and name a variety of organisms, or sort organisms into those found in seaside habitats, and those found in other habitats.</p> <p>Year 1/2: Children identify some animals in a seaside habitat • Children identify some plants in a seaside habitat • Children recognise how animals and plants in a seaside habitat are linked together</p>	<p>Year 1: To understand plants have life-cycles.</p> <p>Year 2: To be able to explain the life-cycle of a plant</p> <p>Activities: Tell another story involving a life-cycle. Discuss story and consolidate the life cycle concept. Go for a walk to nature area (if available) look at plants, flowers, seeds as appropriate. Ask <u>Can you count 5 different kinds of plants?</u> (Bring back leaves, seeds, and flowers to look at in class). Could plant sunflower seeds and follow growth (depending on season). Draw pictures of what happens to plants in different seasons. Draw/Paint a picture of a sunflower showing roots, stem, flower and leaves and stick on real sunflower seed.</p> <p>Outcomes:</p> <p>Year 1: Children can talk about the life cycle of a plant. Children can say what plants need to grow.</p> <p>Year 2: Children can explain the life cycle of a plant. Children can say what plants need to grow.</p>	<p>Year 1/2: To explore rock, its forms and its properties.</p> <p>Activities:</p> <p>Outcomes: Children will identify some common forms of rock as well as thinking about where they have seen it in its natural form. They will look closely at rocks when sorting and describing them. The alternative activity sees the children investigating sand, comparing how it feels and changes when water is added to it.</p> <p>Year 1/2: Children identify a variety of common materials • Children describe the material rock • Children talk about the properties of rock relating to its purpose</p>
Lesson 4	<p>Year 1: To describe the importance of hygiene.</p> <p>Year 2: To investigate how germs are transferred by touching things. (Germ investigation)</p> <p>Activities: Children will learn about the work of significant scientists who studied how diseases. They will then either create information texts about staying healthy, or</p>	<p>Year 1: To understand that magnets can pull and push.</p> <p>Year 2: To understand that magnets can pull and push and they can help us in many ways.</p> <p>Activities: Recap forces. Children use bar magnets to explore what is attracted to the magnet. Children explore the push and the pull with magnets. (repel and attract) Can they feel the force? What is a magnet? Adult led investigation could be to predict and test the strength of the forces in 3 different magnets (e.g. bar, horseshoe and disc magnets) and record findings. Give children the opportunity to play with a</p>	<p>Year 1: To find out about how humans are affected by the seasons.</p> <p>Year 2: To know how humans are affected by the seasons.</p> <p>Activities: Children will learn about how humans adapt their behaviour to survive during the changing seasons. They may then either explore in detail the ways in which clothing worn may change, or what food is available at different times of year.</p> <p>Outcomes:</p> <p>Year 1/2: • Children can explain how the seasons affect what we wear • Children explain how the</p>	<p>Year 1/2: To be able to explore plants and animals in an unfamiliar habitat.</p> <p>Activities: Children will identify characteristics of animals which give clues about the habitats they live in. They will then discuss what a variety of habitats are like, then either describe what they provide for the organisms that live in them, or how organisms are adapted to suit their habitat.</p>	<p>Year 1: To understand the life-cycle of a tree</p> <p>Year 2: To understand the life-cycle of a tree and to care for the environment</p> <p>Activities: Look at a collection of seeds that grow into trees (e.g. apple pips, acorns, seeds out of pine cones, conkers). Talk about the fact that huge trees can grow from tiny seeds. Ask <u>What will they need to grow?</u> Talk about why it is important to plant trees. Talk about how trees have a life cycle. See how far children can get explaining it to you and draw the different stages on the flip chart. Draw out the difference in</p>	<p>Year 1/2: To explore plastic and how it can be used depending on its properties.</p> <p>Activities: Explore plastic and the many different forms and purposes it has with your class. Your children will begin by identifying and describing some common seaside objects that have different properties. They will be encouraged to think carefully about why a product’s purpose affects the properties the material needs.</p> <p>Outcomes:</p> <p>Year 1/2: Children identify a variety of common materials • Children describe the</p>

	<p>explore how germs are transmitted using a scientific model.</p> <p>Outcomes:</p> <p>Year 1:</p> <p>Year 2: • Can the children use their own experiences to make predictions? • Can the children observe patterns? • Can the children talk about what they have found out?</p>	<p>range of different types of magnets and materials. Give chn the opportunity to play with a range of games that use magnets, depending on what you have available, e.g. trains linked by magnets, magnetic letters, fishing game, ladybirds.</p> <p>Outcomes:</p> <p>Year 1: Children understand that magnets can pull and push. Children can talk about some ways that magnets help us.</p> <p>Year 2: Children understand that magnets can pull and push. Children can talk about some ways that magnets help us. Children can think about what might happen before deciding what to do (predict).</p>	<p>seasons affect what we do • Children understand that different food grows in different seasons</p>	<p>Year 1/2: Children name some different types of habitats • Children describe different types of habitats • Children compare habitats and the animals and plants that live in them</p>	<p>timescale between the life cycle of a sunflower and a tree.</p> <p>Plant seeds, Order leaves collected on walk by size or other criteria, stick on strip of paper in order, draw life-cycle.</p> <p>Outcomes:</p> <p>Year 1: Children can talk about why it is important to plant trees. Children can talk about how some life cycles take a long time.</p> <p>Year 2: Children know about different kinds of plants and animals in the local environment. Children begin to know we need to care for the environment.</p>	<p>material plastic • Children talk about the properties of plastic relating to its purpose</p>
Lesson 5	<p>Year 1/2: To find out how to eat a healthy, balanced diet.</p> <p>Activities:</p> <p>Outcomes:</p> <p>Year 1: Children will learn about foods: which are more/less healthy, then either sort foods, or plan, prepare and describe some healthy foods.</p> <p>Year 2: • Do children know why we eat and why it is important to eat a balanced diet? • Do children know which foods we should eat most and least of? • Can children suggest meals that would be good for them?</p>	<p>Year 1: To understand that many appliances use electricity</p> <p>Year 2: To understand that many appliances use electricity – some use mains electricity and some use batteries.</p> <p>Activities: What do we know about electricity – how does electricity light a bulb? Discuss electric power from mains and batteries. Discuss how we use electricity. Which appliances use mains electricity and which use batteries? Do some use both? Sort appliances into 2 large overlapping hoops (Venn diagram).</p> <p>Outcomes:</p> <p>Year 1: Children can identify everyday appliances that use electricity. Children understand that some electric appliances use mains electricity through a plug, and some use batteries.</p> <p>Year 2: Children can identify everyday appliances that use electricity. Children understand that some electric appliances use mains electricity through a plug, and some use batteries. Children realise that some appliances can use either mains (plug) or battery electricity and that the battery has a limited time of operation and needs recharging or changing.</p>	<p>Year 1/2: To find out about the day length is affected by the seasons.</p> <p>Activities: Children will learn how the length of day and night, and the times at which they occur, change throughout the year. They may either answer questions about given information, or sort activities into the seasons for which they are most appropriate.</p> <p>Outcomes:</p> <p>Year 1/2:• Children identify which season has the shortest days • Children identify which season has the longest days • Children know the sun rises in the morning and sets in the evening</p>	<p>Year 1: To be able to explore and a micro-habitat.</p> <p>Year 2: To be able to explore and describe a micro-habitat.</p> <p>Activities: Children will learn about micro-habitats and the organisms that live in them. They may then either explore micro-habitats outside, or describe and categorise given sets of mini-beasts according to some of their characteristics.</p> <p>Outcomes:</p> <p>Year 1:</p> <p>Year 2: Children know what a micro-habitat is • Children name some micro-habitats • Children identify and describe some of the animals that live in micro-habitats</p>	<p>Year 1: To be able to talk about the life cycle of a frog</p> <p>Year 2: To be able to explain the life cycle of a frog</p> <p>Activities: Remind about life cycles studied so far. ‘<u>amphibian</u>’ - means ‘<u>having two lives</u>’ - can live on land or in water. The young (larvae) often look very different to their parents. Focus on frog life-cycle. If you are following development of real tadpoles make charts and drawings over time. Look at different species of frogs.</p> <p>Outcomes:</p> <p>Year 1: To be able to talk about the life cycle of a frog. To understand that there are lots of different species of animals.</p> <p>Year 2: To be able to clearly explain the life cycle of a frog. To relate life processes to animals and plants found in the local environment. To understand how to treat animals with care and sensitivity.</p>	<p>Year 1/2: To recap what we have learnt about seaside materials.</p> <p>Activities: Recap everything that you have learnt about seaside materials, by encouraging your class to think about the purpose and properties of different objects. Your class can identify objects being described or they can be challenged to make one of two seaside objects, thinking carefully about the materials they should use. This final lesson ends with an end of unit quiz.</p> <p>Outcomes:</p> <p>Year 1/2: Children identify a variety of common materials • Children describe a variety of materials • Children explain the purpose of an object</p>
Lesson 6	<p>Year 1: Year 2: To find out why exercise is important to keep our bodies healthy.</p> <p>Activities: Children will consider the importance of exercise, and how different exercises, sports and activities affect different parts of the body. They may then either undertake a sorting activity, or plan a course of exercises.</p> <p>Outcomes:</p>	<p>Year 1: To be able to make a complete circuit</p> <p>Year 2: To be able to make a complete circuit using a battery (cell), wires and bulbs.</p> <p>Activities: Give each pair of children a piece of wire (approx 25 cm) stripped at each end, a wire, bulb and a cell/battery (1.5 volt size C or D). Do not give them battery or bulb holders at this stage. Ask - How can you make the bulb light up? They will need to work co-operatively as a pair to make it happen. Once one pair has achieved it they show others until everyone can do it, and</p>	<p>Year 1: To investigate the weather</p> <p>Year 2: To investigate the weather during the seasons.</p> <p>Activities: Children will complete given pictograms using given sets of data to show changes in weather, or frequency of different types of clothes worn, during each season.</p> <p>Outcomes:</p> <p>Year 1: Children gather weather data</p> <p>• Children use data to create a model of a pictogram</p>	<p>Year 1: To explore food chains in a habitat</p> <p>Year 2: To be able to construct and explain a simple food chain</p> <p>Activities: Children will begin to understand how organisms in a habitat are dependent upon one another, and that these dependencies can be shown as food chains. They may then either complete given food chains, or try to make food chains from a given set of organisms.</p> <p>Outcomes:</p>	<p>Year 1: To begin to ask questions about what I want to find out.</p> <p>Year 2: To ask questions [for example, 'How?', 'Why?', 'What will happen if ...?'] and decide how they might find answers to them.</p> <p>Activities: Mini-beasts – scientist are always asking questions – what questions do we want to find out about the mini-beasts? the last lifecycle we are going to learn about is the dragonfly. Show the children the life cycle sequence</p>	<p>Year 1:</p> <p>Year 2:</p> <p>Activities:</p> <p>Outcomes:</p> <p>Year 1:</p> <p>Year 2:</p>

	<p>Year 1/2: Children know that exercise is an important part of keeping our bodies healthy • Children identify some of the changes that take place in our body when we exercise • Children name various ways they can exercise different parts of their bodies?</p>	<p>do it again. The children draw a simple labelled diagram to show how they did it, labels on board or display. Use bulb holder, crocodile clips and wires and a battery holder - Ask - Could you make the bulb light up on your own? Add buzzer/motor.</p> <p>Outcomes: Year 1: Children can make a bulb light using wires and battery (cell). Children begin to present results using drawings. Year 2: Children use scientific language to name & describe phenomena & processes. Children know how to make a simple series circuits involving batteries, wires, bulbs and other components. Children can present results using drawings.</p>	<p>Year 2: Children gather weather data over a period of time • Children use data to create a pictogram • Children answer questions about their data</p>	<p>Year 1: Children know that animals and plants in a habitat are dependent on each other for food Year 2: Children know that animals and plants in a habitat are dependent on each other for food • Children construct a simple food chain • Children construct food chains that include humans</p>	<p>Outcomes: Year 1: To be able to ask questions and decide how we can answer them. To understand that all living things have a life cycle. Year 2: To be able to ask questions and decide how we can answer them. To understand that all living things have a life cycle. To be able to explain the life-cycle of a dragon-fly</p>	
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Assessment Criteria

	Working Scientifically	<u>Understand Animals Including Humans and Understand Evolution and Inheritance</u>	<u>Understanding Movement, Forces and Magnets and Understand Electrical Circuits</u>	<u>Understand the Earth's Movement in Space</u>	<u>Investigate living Things</u>	<u>Understanding Plants and Understanding animals including humans</u>	<u>Investigate Materials</u>
Year 1	<p>I can</p> <ul style="list-style-type: none"> ask simple questions observe closely using simple equipment perform simple comparative tests identify, sort, group and classify use my observations to help me suggest answers to questions with guidance, begin to notice patterns and relationships observe simple changes over time find information using simple secondary sources 	<p>I can;</p> <ul style="list-style-type: none"> notice that animals, including humans, have offspring which grow into adults. investigate and describe the basic needs of animals, including humans, for survival (water, food and air). <p>I can :</p> <ul style="list-style-type: none"> Identify how humans resemble their parents in many features. 	<p>I can:</p> <ul style="list-style-type: none"> notice and describe how things move, using simple comparisons such as faster and slower. compare how different things move. <p>I can:</p> <ul style="list-style-type: none"> identify common appliances that run on electricity. construct a simple series electrical circuit. 	<p>I can:</p> <ul style="list-style-type: none"> observe the apparent movement of the Sun during the day. observe changes across the four seasons. observe and describe weather associated with the seasons and how day length varies. 	<p>I can:</p> <ul style="list-style-type: none"> explore and compare the differences between things that are living, that are dead and that have never been alive. 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. identify and name a variety of plants and animals in their habitats, including micro-habitats. 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. 	<p>I can:</p> <ul style="list-style-type: none"> observe and describe how seeds and bulbs grow into plants <p>I can:</p> <ul style="list-style-type: none"> notice that animals, including humans, have offspring which grow into adults. explore and compare the differences between things that are living, that are dead and that have never been alive. 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>I can:</p> <ul style="list-style-type: none"> identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock. describe the simple physical properties of a variety of everyday materials. compare and group together a variety of everyday materials on the basis of their simple physical properties. describe the simple physical properties of a variety of everyday materials. compare and group together a variety of everyday materials on the basis of their simple physical properties. identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock, and paper/cardboard for particular uses.
Year 2	<p>I can</p> <ul style="list-style-type: none"> ask simple questions and recognise they can be answered in different ways observe closely using simple equipment perform simple comparative tests identify, sort, group and classify use my observations to help me suggest answers to questions gather and record simple data to help me answer questions with guidance, begin to notice patterns and relationships use simple secondary sources observe changes over time communicate ideas in a variety of ways 						