

Our Science Curriculum

Intent

Science at West Earham Infant and Nursery School aims to build upon children's natural fascination with the world in which they live, and excite children's curiosity to find out more about the phenomena occurring around them. This fascination is developed through first hand exploration which fosters curiosity, critical reflection, co-operation, problem solving, observation, independent learning, perseverance and open mindedness. We aim to train them to think and act as young scientists; carrying out their own experiments, inferring their own conclusions and understanding the relevance of their discoveries to the world in which they live.. We believe that science means exploring, discovering and investigating the world around us and we are committed to providing a stimulating, engaging and challenging learning environment. Our curriculum has been developed by staff to ensure full coverage of the National Curriculum and to foster a sense of wonder about natural phenomena while using scientific vocabulary to strengthen understanding. Throughout our school, children are encouraged to use and develop a range of scientific skills including questioning, researching and observing for ourselves. We promote and celebrate these skills.

Science at West Earham Infant and Nursery school aims to:

- Foster children's wonder and natural curiosity about the world they are in through active engagement in learning experiences.
- Provide opportunities for children to develop knowledge and understanding of key scientific ideas.
- Develop children's scientific enquiry skills in questioning, predicting, planning, observing, measuring, fair testing, recording, interpreting and working systematically through direct experience.

Implementation

- Wherever possible, Science is linked to class topics. At the start of each topic teachers take time to find out what our children already understand and want to find out. Teachers use this to adapt and extend the curriculum to match children's interests and needs, current events, the use of any support staff and the resources available.
- In KS1 children attend Woodland school on a two-weekly basis, to promote children's awe and wonder in order to understand the outside environment and how this can best be looked after.
- Through teacher modelling and planned questioning we want our children to wonder about and be amazed and surprised by the world around them as we recognise that our children sometimes lack experiences.
- Key scientific language is modelled throughout lessons enabling our children to be familiar with and use vocabulary accurately.
- We use Word Aware to support the children to develop their vocabulary by exploring new scientific words and concepts.
- Teachers in Reception and Key stage 1 plan in scientific trips and visitors to enhance our children's learning experience.
- Teach science in a positive, interesting and engaging way for all children
- Provide regular opportunities for children to plan, predict, carry out and evaluate their own investigations when appropriate
- Use practical, hands on approach wherever possible using everyday materials and experiences.
- Ensure continuity and progression through adherence to the key objectives outlined for Reception and Key Stage 1
- Provide termly Science Days to enhance children's skills in 'Working Scientifically' and promote a love and curiosity for the subject.
- Provide a yearly parent science café so that parents can work with their children to

- Provide children with the ability to make informed decisions based on evidence and their own experiences and be able to apply scientific knowledge to new situations.
- Teach children how to communicate their ideas effectively.
- Demonstrate interest and enthusiasm for science and to be confident to participate in exploratory and investigative work.
- Develop cross-curricular skills including mathematics, literacy and computing in order to discuss and record work, communicate scientific ideas through diagrams and charts, and to extract and analyse scientific information.
- Develop positive and respectful values and attitudes towards others in order to communicate effectively, by listening and responding appropriately to ideas shared.
- Develop an awareness and sensitivity to the living and non-living environment through access to the natural environment.
- Develop a responsibility for their own health and safety, and that of others, when undertaking scientific activities.

promote scientific wonder and curiosity whilst the teacher can model to parents' scientific learning.

- Provide opportunities for children to use skills from other curriculum areas e.g. literacy, numeracy and computing. to enhance and extend science
- We provide motivating and purposeful classroom and outside environments where children are encouraged to investigate scientific concepts.

In EYFS, our teaching and learning is underpinned by the Characteristics of Effective Learning. These are particularly pertinent when supporting our children to think scientifically. These characteristics enable our children to approach their learning in a curious and explorative manner whilst making links between their experiences as they do so.

Playing and exploring – engagement

- Finding out and exploring: We encourage all our children to explore and investigate the world around them. A stimulating and engaging learning environment is integral to ensure this learning is maximised to its full potential. Therefore, we facilitate sensory play, triggering children's senses including: sight; sound; smell; taste and touch. These sensory filled activities support our children to learn more about the world around them in a natural way.
- Playing with what they know: We support our children to repeat actions and practice their skills through following their own interests and playing with what they know and enjoy.
- Being willing to have a go: We support our children at the stage appropriate to their development, in order to foster their confidence to try out new things because although we believe children are naturally curious we acknowledge that some can be reserved and shy when trying out new things. Therefore, we offer support by modelling how to do things, encourage a "have a go" attitude and providing relevant language during our interactions.

Active learning – motivation

- Being involved and concentrating
- Keeping trying: We form strong positive relationships with our children, enabling us to

understand our children's strengths and interests, in terms of their likes and dislikes. This enables us to tailor our support and learning based upon their interests and learning requirements. Furthermore, we acknowledge that learning new scientific and problem solving skills can be frustrating, thus we intend to help children to keep trying in order to develop skills that are beneficial for their development.

- Enjoying achieving what they set out to do: Science can be incredibly fulfilling and inspiring, and as a result we aim to foster our children's positivity towards their learning by offering praise linked with their positive attitude to learning as well as their achievements.

Creating and thinking critically – thinking

The development of creative and critical thinking underpins a incredible part of the Science curriculum and we place great emphasis upon these learning skills in order to support our children's creative, imaginative and open-minded approach to their learning.

- Having their own ideas: We provide a plethora of resources for our children to access and engage with, following their own interests and imagination. Our children are encouraged to express themselves with emphasis upon the process rather than the end product. We take this open-ended approach because it enables children to take their learning in the direction that is meaningful to them, and although we could plan an activity with the desired learning in mind, we acknowledge that all children are individuals and their imaginative processes will take their learning in a variety of directions that we cannot always plan for, but we are able to support as they arise.
- Making links: We provide learning themes that enable children to make links across their learning, and through careful questioning, commenting, modelling and implementation of appropriate language, we enable children to make relevant links between their knowledge and understanding. E.g. cause and effect
- Choosing to do things: We provide as much continuous provision time as possible in order to enable our children to lead their own learning and make their own choices. We provide multiple opportunities for children to try new things, and we openly encourage them to do so. It is during these moments, with support from an adult, when children develop their confidence and are then able to make links between their learning and progress their skills and ability to explore and question the world around them.

Our children will experience:	Reception	Year 1	Year 2
<p>Termly science days Loan a Lamb project Farm visit in Reception Owl visit in Year 1 Norfolk Showground visit in Year 2 Visit to see Dippy the Dinosaur in KS1 Visit from a scientist to lead on experiments Science cafe Chicks/ducklings Caterpillars -butterflies</p>	<p>Learning themes:</p> <p>Settling in Signs of Autumn/Winter/Spring/Summer: we look closely at the changes that occur during each season, we discuss the impact this has upon: the environment, what grows and does not grow, what clothes we wear</p> <p>Being healthy- We will look at how we stay healthy through our diet and exercise. How can we spot the signs that we have been exercising, and learning about the importance of a healthy diet and what that looks like.</p> <p>Celebrations Diwali Chinese new year Farming- linked with T4W, we will explore how a farm operates and the animals that you might find there (farm trip). Life cycles- exploring the life cycles of animals including chickens, butterflies and frogs. Planting and growing- as well as a science cafe where the parents are invited in to help plant a bean/ seed, the children will closely/monitor seeds</p>	<p>Learning themes:</p> <p>Plants <u>How do plants grow?-</u> We will be looking closely at our outdoor environment and flower bed, at how plants grow, how they vary and how they can be identified.</p> <p>Animals, including humans An area has been developed in Rowan and Elm for small world. These have been developed with animals from each group (fish, reptiles, amphibians, birds, mammals inc. pets) as a part of the continuous provision. <u>We're going on a bear hunt-</u> The children will explore specific animals and observe what they eat and how that differs from other animals.</p> <p>Everyday materials <u>Three little pigs-</u> The children will closely look at the materials used to build in the story, name them and share what they could be used for. Children will build their own structure using a material of their choice and explain how it suits the purpose. <u>A trip down memory lane-</u> Looking at what materials toys, games and household objects were made of, vs now. The children will be encouraged to explore why there has been a change.</p>	<p>Learning themes:</p> <p>Use of Everyday Materials Great Fire of London - Compare a house built in 1666 and 2020. Identify and compare the suitability of different everyday materials when building their Tudor buildings. We are Authors -Find out how the shapes of some solid objects can be changed by squashing, bending, twisting and stretching. How are books made? What is the best material to use to make books? Which is the strongest paper? Living and nonliving - Plants, Bulb planting - seed diary. Bulb planting! Observe and describe how seeds and bulbs grow into mature plants. Describe how seeds need water, light and temperature to grow and be healthy veg planting. Children will grow plants and use scientific skills to observe, measure, experiment with different growing conditions and use prediction skills to assess their experiments. Growing our own veg.</p> <p>Dragons - Compare the difference between living and dead things and things that have never been alive. Children will compare non living and living creatures and explore the world of different minibeasts.</p>

	<p>planted in the vegetable garden and around our outdoor area.</p> <p>Traditional fairy tales</p> <p>In the Moment Planning: we support, extend, enhance and enrich our children’s learning in the moment when they are following their own interests, whilst engaging in the indoor and outdoor learning environment. During these moments, we teach and support children’s scientific learning (see above re. Characteristics of Effective Learning), this could occur in all areas of our provision including (although not limited to):</p> <ul style="list-style-type: none"> -Sand and water area: floating and sinking, simple experiments, capacity, predictions, testing out simple theories, exploring the properties of materials (waterproof/water resistant/porous etc) - Mud kitchen: make observations of properties of materials, explore what happens when you manipulate resources -Water garden: floating and sinking, exploring simple predictions, what would happen if...?, rerouting water, exploring plants that grow near/apart from the water, different seasons when we can/cannot go in the water area 	<p>Seasonal changes</p> <p>Through the daily routine, and as it occurs, the children will explore the changing seasons and the weather that accompanies it. This allows for there to be a clear understanding of what each season ushers in and what can be expected/ seen.</p>	<p>Animals and humans have offspring that grow into adults. The children will learn that both humans and animals are mammals and give birth to live young. Children will experience the lambs at school and see first hand how they feed and have their survival needs met.</p> <p>Stranded - Find out the basic needs of animals and humans for survival.</p> <p>Olympics 2021 - The importance of humans of exercise, eating different foods and hygiene. The children will learn about why doing the Daily Mile every day is important. They will learn about bad bacteria, being food smart alongside preparing for Sports Day and in 2021 The Olympic Games.</p> <p>The children will take part in a Science, Engineering and Maths project in preparation for Visiting the Royal Norfolk Show where they experiment, present their experiments, create artwork linked to their experiment and produce creative writing around their work.</p> <p>Food Chains - What does a food chain look like? Children look at food chains in Norfolk (coastal creatures, woodland habitats) and compare them to further afield.</p>
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Plants				
	Nursery	Reception	Year One	Year Two
P r o g r e s s i o n o f s k i l s	<p>The World 19-24 months Talks about or responds to what they are seeing or experiencing in the natural world.</p> <p>The World 30-50m</p> <p>Develops an understanding of growth, decay and changes over time. Knows that living things grow and die.</p> <p>Shows care and concern for living things and the environment.</p> <p>Can talk about some of the things they have observed such as plants, animals, natural and found objects.</p> <p>Responds to experiences and explorations of why things happen and how things work in the 'natural' and 'made' world.</p>	<p>Looks closely at similarities, differences, patterns and change in their own environment and that of others.</p> <p>Knows that living things live, grow and die.</p> <p>Knows about similarities and differences in relation to living things. Can make observations of plants and explain why some things occur and talk about change.</p> <p>Knows that the environment and living things are influenced by human activity.</p> <p>The World -ELG Make observations of animals and plants and explain why some things occur, and talk about changes?</p>	<p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p><i>Pupils should use the local environment throughout the year to explore and answer questions about plants growing in their habitat. Where possible, they should observe the growth of flowers and vegetables that they have planted.</i></p> <p><i>They should become familiar with common names of flowers, examples of deciduous and evergreen trees, and plant structures (including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, and stem). Pupils might work scientifically by: observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees. Pupils might keep records of how plants have changed over time, for example, the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants.</i></p>	<p>Observe and describe how seeds and bulbs grow into mature plants.</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p><i>Pupils should use the local environment throughout the year to observe how plants grow. Pupils should be introduced to the requirements of plants for germination, growth and survival, as well as the processes of reproduction and growth in plants.</i></p> <p><i>Note: seeds and bulbs need water to grow but most do not need light; seeds and bulbs have a store of food inside them.</i></p> <p><i>Pupils might work scientifically by: observing and recording, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb, or observing similar plants at different stages of growth; setting up a comparative test to show that plants need light and water to stay healthy.</i></p>

<p>Key voc abul ary</p>	<p>Leaf, plant, flower, grow, water, sun, live, die, see, what</p>	<p>Change, live, grow, die, similar, same, different, patterns, notice, what, when, where, why</p>	<p>Wild plants, garden plants, deciduous, evergreen, leaf, root, leaves, bud, flowers, blossom, petals, root, stem, trunk, branches, fruit, vegetable, bulb, seeds</p>	<p>Grow, healthy, water, light, suitable temperature, germination, reproduction, environment.</p>
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Animals including humans

	Nursery	Reception	Year One	Year Two
Progression of skills	<p>The World 30-50m</p> <p>Develops an understanding of growth, decay and changes over time. Knows that living things grow and die.</p> <p>Shows care and concern for living things and the environment.</p> <p>Talk about some of the things they have observed such as plants, animals, natural and found objects.</p> <p>Observe the effects of activity on their bodies. Knows that some foods are healthy and not healthy.</p> <p>Shows understanding of the need for safety when tackling new challenges, and considers and manages some risks.</p>	<p>Knows that living things live, grow and die.</p> <p>Knows about similarities and differences in relation to living things.</p> <p>Knows the environment and living things are influenced by human activity.</p> <p>Talks about similarities and differences between themselves and others and among families, communities and traditions.</p> <p>Shows an awareness and understanding of the effects of physical activity and what they eat on their body.</p> <p>Knows the importance of good health and physical exercise, and a healthy diet, and talks about ways to keep healthy and safe.</p> <p>Knows about and can make healthy choices in relation to healthy eating</p>	<p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals identify and name a variety of common animals</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</p> <p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense? <i>Pupils should use the local environment throughout the year. They should understand how to take care of animals taken from their local environment and the need to return them safely after study. Pupils should know the common names of some fish, amphibians, reptiles, birds and mammals, including pets. Pupils should have plenty of opportunities</i></p>	<p>Notice that animals, including humans, have offspring which grow into adults.</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p><i>Pupils should be introduced to the basic needs of animals for survival, as well as the importance of exercise and nutrition for humans. They should also be introduced to the processes of reproduction and growth in animals. The focus at this stage should be on questions that help pupils to recognise growth; they should not be expected to understand how reproduction occurs.</i></p> <p><i>The following examples might be used: egg, chick, chicken; egg, caterpillar, pupa, butterfly; spawn, tadpole, frog; lamb, sheep. Growing into adults can include reference to baby, toddler, child, teenager, adult.</i></p> <p><i>Pupils might work scientifically by: observing, through video or first-hand observation and measurement, how different animals, including humans, grow; asking questions about what things animals need for survival and what humans need to stay healthy; and suggesting ways to find answers to their questions.</i></p>

		<p>and exercise.</p> <p>The World -ELG Make observations of animals and plants and explain why some things occur, and talk about changes?</p> <p>Health and Safe care – ELG Children know the importance for good health, of physical exercise and a healthy diet, and talk about ways to keep healthy and safe.</p>	<p><i>to learn the names of the main body parts (including head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth) through games, actions, songs and rhymes. Pupils might work scientifically by: using their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them; grouping animals according to what they eat; and using their senses to compare different textures, sounds and smells.</i></p>	
<p>Key vocabulary</p>	<p>Healthy, water, food, hot, exercise, fruit, vegetables Caterpillar-butterfly tadpole-frog Egg, hatch, bird Baby, adult nose-smell ears-listen, hear eyes-see/look</p>	<p>Healthy, exercise, safe, live, grow, die, change, similar, different, fruit, vegetables, balanced, diet. Egg, chick, chicken Lamb, sheep Caterpillar, pupa, butterfly frogspawn, tadpole, froglet, frog</p>	<p>Fish, amphibians, reptiles, birds, mammals, pets, head, legs, eyes, neck, knees, hair, arms, face, mouth, elbows, ear, teeth. Senses, tongue-taste, nose-smell, eyes-vision, skin-touch, ears-hearing. Omnivores, carnivores, herbivores</p>	<p>Offspring, grow, adults Survival – water, food, air, exercise, hygiene Nutrition, reproduce Egg, chick, chicken Caterpillar, pupa, butterfly Spawn, tadpole, frog Baby, toddler, child, teenager, adult</p>

Living things and habitats

Living things and habitats				
	Nursery	Reception	Year One	Year Two
Progression of skills	<p>The World 30-50m</p> <p>Shows care and concern for living things and the environment.</p> <p>Talk about some of the things they have observed such as plants, animals, natural and found objects.</p>	<p>Knows that living things live, grow and die.</p> <p>Knows about similarities and differences in relation to living things. Can make observations of plants and explain why some things occur and talk about change.</p> <p>Knows that the environment and living things are influenced by human activity.</p> <p>The World ELG Children know about similarities and differences in relation to places, objects, materials and living things.</p>		<p>Explore and compare the differences between things that are living, dead and things that have never been alive.</p> <p>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>Identify and name a variety of plants and animals in their habitats, including micro-habitats.</p> <p>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><i>Pupils should be introduced to the idea that all living things have certain characteristics that are essential for keeping them alive and healthy. They should raise and answer questions that help them to become familiar with the life processes that are common to all living things. Pupils should be introduced to the terms 'habitat' (a natural environment or home of a variety of plants and animals) and 'microhabitat' (a very small habitat, for example for woodlice under stones, logs or leaf litter). They should raise and answer</i></p>

				<p><i>questions about the local environment that help them to identify and study a variety of plants and animals within their habitat and observe how living things depend on each other, for example, plants serving as a source of food and shelter for animals. Pupils should compare animals in familiar habitats with animals found in less familiar habitats, for example, on the seashore, in woodland, in the ocean, in the rainforest. Pupils might work scientifically by: sorting and classifying things according to whether they are living, dead or were never alive, and recording their findings using charts. They should describe how they decided where to place things, exploring questions like: 'Is a flame alive? Is a deciduous tree dead in winter?' and talk about ways of answering their questions. They could construct a simple food chain that includes humans (e.g. grass, cow, human). They could describe the conditions in different habitats and microhabitats (under log, on stony path, under bushes); and find out how the conditions affect the number and type(s) of plants and animals that live there</i></p>
<p>Key vocabulary</p>	<p>Hard, soft, cold, Trees, leaves, flowers, grow, die, insects (living things observed in our nursery environment)</p>	<p>Change, live, grow, die, similar, different, living things, environment</p>		<p>Living, dead, never alive, habitats, micro-habitats, food chain, alive, healthy, leaf litter, stony path, under bushes, shelter, seashore, woodland, ocean, rainforest, conditions, hot/warm/cold dry/damp/wet bright/shade/dark</p>

Everyday materials				
	Nursery	Reception	Year One	Year Two
Pro gres sion of skill s	<p>The World 22-36m</p> <p>Notices detailed features of objects in their environment.</p> <p>Beginning to be interested in and describe the texture of things.</p> <p>Manipulates materials to achieve a planned effect.</p>	<p>Knows about similarities and difference in relation to places, objects, materials and living things.</p> <p>Knows the properties of some materials and can suggest some of the purposes they are used for.</p> <p>The World ELG Can I talk about similarities and differences in relation to places, objects, materials and living things?</p>	<p>Distinguish between an object and the material from which it is made.</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</p> <p>Describe the simple physical properties of a variety of everyday materials.</p> <p>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p><i>Pupils should explore, name, discuss and raise and answer questions about everyday materials so that they become familiar with the names of materials and properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent. Pupils should explore and experiment with a wide variety of materials, not only those listed in the programme of study, but including for example: brick, paper, fabrics, elastic, and foil.</i></p> <p><i>Pupils might work scientifically by: performing</i></p>	<p>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>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p><i>Pupils should identify and discuss the uses of different everyday materials so that they become familiar with how some materials are used for more than one thing (metal can be used for coins, cans, cars and table legs; wood can be used for matches, floors, and telegraph poles) or different materials are used for the same thing (spoons can be made from plastic, wood, metal, but not normally from glass). They should think about the properties of materials that make them suitable or unsuitable for particular purposes and they should be encouraged to think about unusual and creative uses for everyday materials. Pupils might find out about people who have developed useful new materials, for example John Dunlop, Charles Macintosh or John McAdam.</i></p> <p><i>Pupils might work scientifically by: comparing the uses of everyday materials in and around the school with materials found in other places (at</i></p>

			<p><i>simple tests to explore questions, for example: 'What is the best material for an umbrella? ... For lining a dog basket? ... For curtains? ... For a bookshelf? ... For a gymnast's leotard?'</i></p>	<p><i>home, the journey to school, on visits, and in stories, rhymes and songs); observing closely, identifying and classifying the uses of different materials, and recording their observations.</i></p>
<p>Key voc abul ary</p>	<p>Properties - smooth/rough, soft/hard, spiky, Glass, wood, paper</p>	<p>Similar, same, different, material, wood, metal, glass, brick, rock, paper, cardboard</p> <p>Properties – hard/soft stretchy/stiff shiny/dull rough/smooth bendy/not bendy waterproof/not waterproof</p>	<p>Material - wood, metal, plastic, glass, brick, rock, water, paper, fabrics, elastic, foil.</p> <p>Properties – hard/soft stretchy/stiff shiny/dull rough/smooth bendy/not bendy waterproof/not waterproof absorbent/not absorbent opaque/transparent.</p>	<p>Material – wood, metal, plastic, glass, brick, rock, water, paper, fabrics, elastic, foil, rubber, cardboard. Suitable, unsuitable Squashing, bending, twisting, stretching</p>

Seasonal changes				
	Nursery	Reception	Year One	Year Two
Pro gres sion of skill s	<p><u>The World 40-60m</u> Responds to experiences and explorations of why things happen and how things work in the 'natural' and 'made' world.</p> <p>Looks closely at similarities, differences, patterns and change in their own environment and that of others.</p>	<p>Responds to experiences and explorations of why things happen and how things work in the 'natural' and 'made' world.</p> <p>Looks closely at similarities, differences, patterns and change in their own environment and that of others.</p> <p>The World ELG Talk about the features of my own immediate environment and how environments might vary from one another?</p>	<p>Observe changes across the four seasons.</p> <p>Observe and describe weather associated with the seasons and how day length varies.</p> <p><i>Pupils should observe and talk about changes in the weather and the seasons.</i></p> <p><i>Note: pupils should be warned that it is not safe to look directly at the sun, even when wearing dark glasses.</i></p> <p><i>Pupils might work scientifically by: making tables and charts about the weather; and making displays of what happens in the world around them, including day length, as the seasons change.</i></p>	
Key voc abul ary	<p>Day, night, Summer, Winter, Autumn, Spring. Weather - hot/sunny, cold, windy, rain, clouds, snow, ice.</p>	<p>Season, spring, summer, autumn, winter. Day, daytime, night, night time. Weather, wind, windy, rain, snow, cloudy, sun, hot, warm, cold.</p>	<p>Season, spring, summer, autumn, winter. Day, daytime, night, night time. Weather, wind, rain, snow, hail, sleet, cloudy, stormy, fog, sun, hot, warm, cold.</p>	

Working scientifically			
			Year One and Year Two
Pro gres sion			<p>During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> ● asking simple questions and recognising that they can be answered in different ways ● observing closely, using simple equipment ● performing simple tests ● identifying and classifying ● using their observations and ideas to suggest answers to questions ● gathering and recording data to help in answering questions <p>Additional Guidance:</p> <p>Pupils in years 1 and 2 should explore the world around them and raise their own questions. They should experience different types of scientific enquiries, including practical activities, and begin to recognise ways in which they might answer scientific questions.</p> <p>They should use simple features to compare objects, materials and living things and, with help, decide how to sort and group them, observe changes over time, and, with guidance, they should begin to notice patterns and relationships.</p> <p>They should ask people questions and use simple secondary sources to find answers.</p> <p>They should use simple measurements and equipment (for example, hand lenses, egg timers) to gather data, carry out simple tests, record simple data, and talk about what they have found out and how they found it out. With help, they should record and communicate their findings in a range of ways and begin to use simple scientific language.</p> <p>These opportunities for working scientifically should be provided across years 1</p>

			and 2 so that the expectations in the programme of study can be met by the end of year 2. Pupils are not expected to cover each aspect for every area of study.
Key vocabulary			Method, observe, question, equipment, tests, identify, classify, gather, record, compare, patterns