



Subject Overview: Science  
 Intent (Skills/ knowledge)  
 Implementation (How/ When)

		Intent/Implementation	
		Year 1	Year 2
INTENT	<p><b>FS</b></p> <ul style="list-style-type: none"> <li>• <b>3- 4years:</b> Use all their senses in hands-on exploration of natural materials.</li> <li>• Explore collections of materials with similar and/or different properties.</li> <li>• Talk about what they see, using a wide vocabulary.</li> <li>• Begin to make sense of their own life-story and family's history.</li> <li>• Explore how things work.</li> <li>• Plant seeds and care for growing plants.</li> <li>• Understand the key features of the life cycle of a plant and an animal.</li> <li>• Begin to understand the need to respect and care for the natural environment and all living things.</li> <li>• Explore and talk about different forces they can feel.</li> <li>• Talk about the differences between materials and changes they notice.</li> </ul> <p>Reception:</p> <ul style="list-style-type: none"> <li>• Explore the natural world around them.</li> <li>• Describe what they see, hear and feel while they are outside.</li> <li>• Recognise some environments that are different to the one in which they live.</li> </ul>	<p><b>Plants:</b></p> <ul style="list-style-type: none"> <li>• Pupils should be taught to - identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</li> <li>• identify and describe the basic structure of a variety of common flowering plants, including trees</li> </ul> <p><b>Animals including humans:</b></p> <ul style="list-style-type: none"> <li>• identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> <li>• identify and name a variety of common animals that are carnivores, herbivores and omnivores</li> <li>• describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</li> <li>• identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</li> </ul> <p><b>Seasonal changes:</b></p> <ul style="list-style-type: none"> <li>• observe changes across the four seasons</li> <li>• observe and describe weather associated with the seasons and how day length varies</li> </ul> <p><b>Everyday Materials:</b></p> <ul style="list-style-type: none"> <li>• distinguish between an object and the material from which it is made</li> <li>• identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</li> <li>• describe the simple physical properties of a variety of everyday materials</li> <li>• compare and group together a variety of everyday materials on the basis of their simple physical properties</li> </ul>	<p><b>Plants:</b></p> <ul style="list-style-type: none"> <li>• observe and describe how seeds and bulbs grow into mature plants</li> <li>• find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</li> </ul> <p><b>Animals including humans:</b></p> <ul style="list-style-type: none"> <li>• notice that animals, including humans, have offspring which grow into adults</li> <li>• find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</li> <li>• describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</li> </ul> <p><b>Living things and their habitats:</b></p> <ul style="list-style-type: none"> <li>• explore and compare the difference between things that are living, dead, and things that have never been alive</li> <li>• identify that most living things live in habitats to which they are suited and describe how different habitats provide the basic needs of different kinds of animals and plants, and how they depend on each other</li> <li>• identify and name a variety of plants and animals in their habitats, including micro-habitats</li> <li>• 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</li> </ul> <p><b>Everyday Materials</b></p> <ul style="list-style-type: none"> <li>• identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</li> <li>• find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</li> </ul>



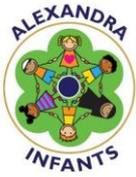
Understand the effect of changing seasons on the natural world around them.

- ELG: Explore the natural world around them, making observations and drawing pictures of animals and plants.
- 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.
- Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.

**IMPLEMENTATION**

FS	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
FS 1	<p>Exploring 5 senses: Key Questions: What can you see/hear/feel/smell/taste?</p> <p><b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>• Use all their senses in hands-on exploration of natural materials.</li> </ul> <p>Explores how things work/ explores magnets:</p>	<p>Seasonal change: Key Questions: What can you see? What has happened? How do they look?</p> <p><b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>• Talk about what they see, using a wide vocabulary</li> </ul> <p><b>Environment walk</b></p>	<p>Seasonal change: Key Questions: What can you see? What has happened? How do they look?</p> <p><b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>• Talk about what they see, using a wide vocabulary.</li> </ul> <p>Name and sort materials by hard/soft: Key Questions: How does it feel? What is it?</p> <p><b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>• Talk about the differences</li> </ul>	<p>Identify plants/Plant seeds and care for them (support) Key Questions: What does it need? How can we look after it?</p> <p><b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>• What do they need to survive: Plant seeds and care for growing plants</li> </ul>	<p>Can talk about the life cycles of a chick/spiders: Key Questions: What can you see? What has happened? How has it changed?</p> <p><b>Key teaching points:</b></p> <p>Understand the key features of the life cycle of a plant and an animal.</p> <ul style="list-style-type: none"> <li>• Begin to understand and the need to</li> </ul>	<p>Seasonal change: Key Questions: What can you see? What has happened? How does it look?</p> <p><b>Key teaching points:</b> Talk about what they see, using a wide vocabulary.</p> <p>Floating and sinking: Key Questions: What is happening?</p> <p><b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>• Explores how things work</li> <li>• Explore and talk about different forces they</li> </ul>

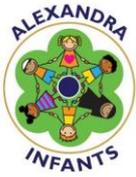
	<p>Key Questions: What can you see? What is happening?</p> <p><b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>Explore and talk about different forces they can feel.</li> </ul>		<p>between materials and changes they notice.</p> <ul style="list-style-type: none"> <li>Explore collections of materials with similar and/or different properties.</li> </ul> <p><b>Environment walk</b></p>		<p>respect and care for the natural environment and all living things.</p> <p><b>Educational visit- farm</b></p> <p><b>Chicks</b></p>	<p>can feel.</p> <p><b>Environment walk</b></p>
Vocabulary	<p>Hear, see, touch, feel, taste, smell, smooth, rough, wet, dry, cold, hot, sweet, sour, loud, quiet, stick together, magnetic, magnets, push, pull</p>	<p>Autumn, change, leaves, colour, red, brown, orange, yellow, green, fall down, trees.</p>	<p>Winter, change, cold, frost, snow, rain, dark, materials, hard, soft, wood, chair, beds, metal, cushions, paper, card, lego, blocks</p>	<p>Plants, seeds, soil, pot, trowel, water, watering can, sunlight</p>	<p>Life cycle, chick, egg, spider, egg sack, spiderlings, change, grow, hatch, lay, web, incubator, feeder, heater.</p>	<p>Spring, summer change, flower buds, growing, warm, dry, green, colour. Floating, sinking, water, drop, on top, under, objects,</p>
FS 2	<p>Name and explain the 5 senses: <b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>Describe what they see, hear and feel while they are outside.</li> </ul> <p>Materials <b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>Explore collections of materials with similar and/or different properties.</li> <li>Talks about changes they notice</li> </ul>	<p>Seasonal change- Autumn/winter: <b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>Explore the natural world around them.</li> <li>Describe what they see, hear and feel while they are outside.</li> <li>Understand the effect of changing seasons on the natural world around them.</li> </ul> <p><b>Environment walk</b></p>	<p>Plants: <b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>Explore the natural world around them, making observations and drawing pictures of animals and plants.</li> <li>Understands they need to respect and care for natural environment and all living things.</li> </ul>	<p>Seasonal change- spring: <b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>Understand the effect of changing seasons on the natural world around them.</li> <li>Understand some important processes and changes in the natural world around them, including the seasons and changing</li> </ul>	<p>Life cycles: <b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>Explore the natural world around them, making observations and drawing pictures of animals and plants.</li> <li>Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has</li> </ul>	<p>Seasonal change- summer: <b>Key teaching points:</b></p> <ul style="list-style-type: none"> <li>Understand the effect of changing seasons on the natural world around them.</li> <li>Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</li> </ul> <p>Explores non-contact forces: <b>Key teaching points:</b></p>



				states of matter. <b>Environment walk</b>	been read in class. <b>Educational visit- Peak wildlife park</b>  <b>Chicks</b>	• Notices links between cause and effect <b>Environment walk</b>
Vocabulary	Hear, see, touch, feel, taste, smell, loud, quiet, silent, textures, rough, smooth, bumpy, prickly, hard, soft, squishy, wet, dry, sticky. Materials, strong, weak, wood, sticks, bricks, lego, blocks, straw, paper, card.	Autumn, change, leaves, colour, red, brown, orange, yellow, green, fall down, trees, wind, blow, conkers, conker shells, crunchy, spiky, smooth, breeze, drizzle, winter, freezing, snow, icy, frost, rain, dark.	Plants, seeds, bulbs, water, sunlight, soil, trowel, plant pot, watering can, need, survive, grow, seedling, shoots, roots, stem, flower.	Spring, change, buds, flowers, new life, growing, green, fresh, new, warm, sun, colour	Life cycle, chick, egg, , change, grow, hatch, lay, incubator, feeder, heater, caterpillar, butterfly, cocoon, chrysalis, change, observe, how?	Summer, change, hot, dry, bright, flowers, bloom, plants, trees, bees, sun, sun safety, sun cream, sun hats, push pull, drop, fall, ground, stick together, magnets,



	Topic 1	Topic 2	Topic 3	Topic 4
Year 1	<p><b><u>Seasonal changes- I can be a weather reporter</u></b></p> <p><b>WOW: watch a weather report shown on TV</b></p> <p><b>Books to share – Nat Geographic - Everything weather, Nat Geo – storms, Nat Geo – weather</b></p> <p>Key questions – What is the weather like in the UK? How is the weather different in seasons? What happens to the weather? How can we measure the weather? How long is the day? What factors in the days length?</p> <p><b><u>Key Teaching Points:</u></b></p> <ul style="list-style-type: none"> <li>• Children to observe changes across the four seasons</li> <li>• Children to observe and describe the weather and associate it with the seasons</li> <li>• Children to look at how day length (pattern seeking) varies in relation to weather/seasons</li> <li>• Children to make their own weather station- rain gauge/windsock (observing over time)</li> <li>• Children to write their own weather report (Alexandra Promise)</li> </ul>	<p><b><u>Everyday materials- How can we build the 3 pigs a house?</u></b></p> <p><b>WOW: A letter from the 3 little pigs</b></p> <p><b>Books to share –the 3 little pigs</b></p> <p>Key questions – How can we classify the materials? What properties do they have? What is strong/waterproof/transparent etc? How can we test them? What would make it fair?</p> <p><b><u>Key teaching points:</u></b></p> <ul style="list-style-type: none"> <li>• Children to distinguish between what the object is and the material from it is made from</li> <li>• Children to identify and name a variety of everyday materials</li> <li>• Children to be able to describe the properties of a variety of everyday materials</li> <li>• To compare and sort a variety of everyday materials based on their properties</li> </ul>	<p><b><u>Plants- I can complete a dissection.</u></b></p> <p><b>WOW: Trip to Longton park</b></p> <p><b>Books to share – the tiny seed</b></p> <p>Key questions – What is inside the flower? How can we find out? What tools should we use? What are the different parts of the plant? What plants can I find in our local area? What are they called? How do they grow? What parts do they have?</p> <p><b><u>Key Teaching Points:</u></b></p> <ul style="list-style-type: none"> <li>• Children to learn the names of common/garden plants and trees.</li> <li>• Children to label and describe the parts of a variety of common flowers and trees</li> </ul> <p><b><u>Educational Visit –</u></b> Local environment walk</p>	<p><b><u>Animals including humans-</u></b></p> <p><b>WOW: Gentleshaw visit</b></p> <p>Key questions – What type of animals are there? How can we sort them? Can we identify some of the features? What types of food do eat? How can we sort them? What are our senses? How do we use them?</p> <p><b><u>Key Teaching Points:</u></b></p> <ul style="list-style-type: none"> <li>• Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> <li>• Identify and name a variety of common animals that are carnivores, herbivores and omnivores</li> <li>• Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</li> <li>• Food families – researching into different food groups and identifying and classifying into different food groups (research)</li> <li>• Senses - Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</li> </ul> <p><b><u>Educational Visit- Gentleshaw</u></b></p>



<p><b>Vocabulary</b></p>	<p>Season, spring, summer, autumn, winter, weather, hot, warm, cool cold, sunny, cloudy, windy, rainy, snowing, hailing, sleet, frost, fog, mist, icy, rainbow, thunder, lightning, storm, light, dark, day, night</p> <p>Questions, answers, equipment, gather, measure, record, results, sort, group, test, explore, predict, observe, compare, describe, similar/ities, different/ces, beaker, pipette, syringe</p>	<p>Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, waterproof, absorbent, tear, rough, smooth, shiny, dull, see through, not see through</p>	<p>Names of: wild plants, garden pants, flowering plants, trees, leaf, flower, blossom, petal, fruit, berry, root, bulb, seed, trunk, branch, stem, bark, stalk, vegetable</p>	<p>Body, head, neck, arms, elbows, legs, knees, face, ears, eyes, eyebrows, eyelashes, nose, hair, mouth, teeth, tongue, feet, toes, fingers, nails, ankle, calf, thigh, hips, waist, trunk, chest, shoulders, back, hands, wrist, tail, wing, claw, fin, scales, feathers, fur, beak, senses, hearing, seeing, touching, smelling, tasting, smooth, bright, dim, loud, quiet, high, low</p>
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<p>Year 2</p>	<p><b><u>Everyday materials- I can be build a house from the Great fire of London</u></b></p> <p><b>WOW: Samuel Pepys visitor</b></p> <p><b>Key questions</b> –What is it made of? Can we sort them? How can we change it? What will happen if? Is it solid?</p> <p><b>Key Teaching Points:</b></p> <ul style="list-style-type: none"> <li>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> <li>What materials would be best to build a house? Why?</li> </ul>	<p><b><u>Animals including humans- How do we change and grow?</u></b></p> <p><b>WOW: Visit from a baby</b></p> <p><b>Key questions</b> – How do we change? Why are not babies anymore? What happens to us/animals as we get older? What do need to grow? What do we need to be healthy? Why do we exercise?</p> <p><b>Key Teaching Points:</b></p> <ul style="list-style-type: none"> <li>Children to understand that animals, including humans, have offspring which grow into adults</li> <li>Describe the basic needs of animals, including humans, for survival (water, food and air)</li> <li>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</li> </ul> <p><b><u>Educational Visit- visit from parent and baby</u></b></p>	<p><b><u>Plants- What are the best conditions for a plant to grow</u></b></p> <p><b>WOW: Grow our own plant</b></p> <p><b>Key questions</b> – How do plants grow? What do they need to grow? How do they change over time? How can we make them different?</p> <p><b>Key Teaching Points:</b></p> <ul style="list-style-type: none"> <li>Observe and describe how seeds and bulbs grow into mature plants</li> <li>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy- growing plants in different conditions (observe over time)</li> </ul>	<p><b><u>Living things and their habitats</u></b></p> <p><b>WOW: visit to a habitat</b></p> <p><b>Key questions</b> – How are they different? How do we know they are alive/dead? Where do they live? What do they need?</p> <p><b>Key Teaching Points:</b></p> <ul style="list-style-type: none"> <li>Explore and compare the differences between things that are living, dead, and things that have never been alive.</li> <li>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.</li> <li>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.</li> </ul> <p><b><u>Educational Visit- Environment walk</u></b></p>
<p><b>Vocabulary</b></p>	<p>Suitable/unsuitable, use, object material, property, wood, plastics, glass, metal water, rock, fabrics, hard, soft, stretchy, flexible, waterproof, absorbent, transparent, translucent, opaque, shape, change, twist, squash, bend, stretch, roll, squeeze</p> <p>predict, reliable, prediction</p>	<p>offspring, life cycles, grow, change, adults, basic needs, water, food, air survival, exercise, food types (fruit and veg, bread, rice, pasta, milk, dairy, foods high in fat and sugar, meat, fish, eggs, beans), hygiene</p> <p>predict, reliable, prediction</p>	<p>seeds, bulbs, water, light, growth, healthy, shoot, seedling</p> <p>predict, reliable, prediction</p>	<p>Living, dead, never been alive, names of local habitats, pond, woodland, meadow, name micro habitats, under log, stony path, under bushes, suited, basic needs, depend, food, food chain, Shelter</p> <p>predict, reliable, prediction</p>