SCIENCE PROGRESSION MAP

	Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
Reception	**Ourselves** Our Bodies Our Families Autumn Our Homes **Statements from Development Matters** Talk about members of their immediate family and community. Name and describe people who are familiar to them. Explore the natural world around them. Encourage interactions with the outdoors to foster curiosity and give children freedom to touch, smell and hear the natural world around them during hands-on experiences.		**Our Community** Winter Farms Spring **Statements from Development Matters** Explore the natural world around them. Guide children's understanding by draw children's attention to the weather and seasonal features. Look for children incorporating their understanding of the seasons and weather in their play. Describe what they see, hear and feel whilst outside. Name and describe some plants and animals children are likely to see, encouraging children to recognise familiar plants and animals whilst outside. Understand the effect of changing seasons on the natural world around them.		**Our World** Under the Sea Space Jungles Growing Summer **Statements from Development Matters** Recognise some similarities and differences between life in this country and life in other countries. Recognise some environments that are different from the one in which they live. **ELG** Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.	
	Why this and why now?					
	As children settle into our school we focus on what is familiar to them so that they can use their first-hand experiences within their science work, giving them the opportunity to share their knowledge of the natural world. Children will observe and explore the natural changes of the world through the season of Autumn, making use of their forest area to observe the changing colours of the trees.		As the children develop through their first year at school, we build upon their prior knowledge and extend their vocabulary. We encourage children to have a good understanding of our local community, so they can use this information to observe similarities and differences between our local environment and a contrasting area next term. Children will observe and explore the natural changes of the world through the seasons of winter and spring.		Children will use their prior knowledge to observe similarities and differences between our local area and contrasting environments. Children will observe and explore the natural changes of the world through the season of Summer. Children will be able to use their observational skills to watch plants grow. They will explore floating and sinking and share their observations and questions. The Children are given the opportunity to explore a variety of materials – a knowledge which they will then deepen in Year One when investigating everyday materials.	

	Vocabulary, Key Concepts/Skills					
	Baby, toddler, child, teenager, adult Arm, leg, foot, toes, chest, back, arm, hand, face. Puppy, dog, kitten, cat, kitten, rabbit, fry, fish. Brick, glass, wood, metal. Tree, leaves, colder, darker, rain. <u>To use their senses to investigate.</u> <u>To observe and identify.</u> <u>To look for; similarities, differences and patterns.</u> <u>To ask questions.</u> <u>To talk about their findings.</u>		Piglet, pig, calf, cow, foal, horse, chick, chicken, lamb, sheep. Cold, snow, wind, frost, night. Warmer, sunlight, growth. <u>To use their senses to investigate.</u> <u>To observe and identify.</u> <u>To look for; similarities, differences and patterns.</u> <u>To ask questions.</u> <u>To talk about their findings.</u>		Fish, shark, octopus, monkey, tiger, snake. Floating, sinking. Space, star, moon, planet. Growth, seed, soil, sun Warmer, sunlight. <u>To use their senses to investigate.</u> <u>To observe and identify.</u> <u>To look for; similarities, differences and patterns.</u> <u>To ask questions.</u> <u>To talk about their findings.</u>	
	Autumn One	**Autumn Two**	**Spring One**	**Spring Two**	**Summer One**	**Summer Two**
Year One Science Enquiry on going throughout the year	Animals including humans To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Seasonal Changes To observe changes across the four seasons. To observe and describe weather associated with the seasons and how day length varies. Autumn	Animals including humans To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Seasonal Changes To observe changes across the four seasons. To observe and describe weather associated with the seasons and how day length varies. Winter	Everyday Materials To distinguish between an object and the material from which it is made. To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. To describe the simple physical properties of a variety of everyday materials. To compare and group together a variety of everyday materials on the basis of their simple physical properties.	Plants To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. To identify and describe the basic structure of a variety of common flowering plants, including trees. To observe and describe weather associated with the seasons and how day length varies. Spring	Animals including humans To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)	Animals including humans To identify and name a variety of common animals that are carnivores, herbivores and omnivores. Seasonal Changes To observe changes across the four seasons. To observe and describe weather associated with the seasons and how day length varies. Summer

	Why this and why now?					
	During the unit 'Our Bodies' in EYFS, children discovered the parts of the body. This unit aims to reinforce this concept and introduce the five senses associated to these body parts. Children will draw upon their first-hand experiences of observing seasons in EYFS. Through this unit they will develop a greater understanding of the ways in which the features of the seasons change, including the weather. Using the environment within our school grounds and surrounding area, children will experience the change of season – Autumn.	Building on prior knowledge of animals, which the children experienced in their EYFS topics 'Farms', 'Under the Sea' and 'Jungles', they will extend their knowledge and understanding of the ways in which these animals, and others, are classified. This will include comparing humans to other animals. Children's knowledge of humans, gained in Term One, will also support this. They will also continue to deepen their understanding of seasons from Term One as we begin to see the season change into Winter.	Children will have developed a bank of vocabulary linked to materials through their varied provision in EYFS. This knowledge will have also been developed through the 'Our Homes' topic. This unit, however, will be the first opportunity children have had to discover the properties of materials and how they can be classified.	During the Summer Term in EYFS, children experience the unit 'Growing'. This gave them first-hand experience of planting seeds and watching them grow. This unit builds on this experience, extending knowledge of the structure of common plants and trees. Their understanding of seasons from Term One and Two will develop further as they study Spring.	Having developed a wider knowledge of animals and their classification in Term Two, this unit will extend our scientists understanding of the structure of animals as a further means of making comparison.	Children's knowledge of animals, gained in Terms Two and Four will be consolidated in this unit. They will also reflect on their knowledge of season, developed from EYFS and in Term One, Two and Four, to include Summer. This will complete the cycle of learning about seasons ahead of children moving into Year Two.
	Vocabulary, Key Concepts/Skills					
	Body parts; leg, arm, head, back nose, ear and eye. Senses; taste, touch, smell, hearing and eye sight. <u>To observe closely.</u> <u>To identify.</u> <u>To answer simple questions.</u> <u>To perform simple tests using comparison.</u>	Animals, birds, reptiles, mammals, amphibians, fish, observe, identify. <u>To observe closely.</u> <u>To identify.</u> <u>To classify,</u>	Wood, Plastic, Glass, Metal, Water, Rock, Hard/soft, Stretchy/ stiff, Shiny/dull, Rough/ smooth, Bendy, Waterproof Absorbent <u>To ask simple questions and recognising that they can be answered in different ways. To observe closely, using simple equipment. To perform simple tests. To</u>	Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, bulb. <u>To observe closely, using simple equipment.</u> <u>To perform simple tests.</u> <u>To identify and classify.</u> <u>To use their observations and ideas to suggest answers to questions.</u>	Animals, birds, reptiles, mammals, amphibians, fish, observe, identify. Compare, similarities, differences, observations, features, animal groups, feathers, scaly skin, hair. Tail, wings <u>To observe closely.</u> <u>To identify.</u> <u>To classify,</u>	Herbivore, carnivore, omnivore, diet, meat, vegetables, plants, hunter, prey. <u>To observe closely.</u> <u>To identify.</u> <u>To classify,</u> <u>To answer simple questions.</u>

			identify and classify. To use their observations and ideas to suggest answers to questions. To gather and record data to help in answering questions.			
	Autumn One	**Autumn Two**	**Spring One**	**Spring Two**	**Summer One**	**Summer Two**
Year Two Science Enquiry on going throughout the year	**Animals including humans** To notice that animals, including humans, have offspring which grow into adults. To describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	**Animals including humans** To find out about and describe the basic needs of animals, including humans, for survival (water, food and air) To explore and compare the differences between things that are living, dead, and things that have never been alive.	Use of Everyday Materials To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	Plants To observe and describe how seeds and bulbs grow into mature plants. To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Animals including humans 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. To identify and name a variety of plants and animals in their habitats, including microhabitats	Animals including humans 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.
	Why this and why now?					
	Children will deepen their knowledge from Year One moving from labelling the body to thinking about how a person changes over time. They will learn how to keep their bodies healthy. Knowledge that will be reinforced through the PE and PSHE curriculum.	Children will deepen their prior knowledge from Term Two - keeping our body health by learning what animals need to survive? They will also discover how we know if something is alive.	This unit will deepen their knowledge from Year One, Term Three – naming different materials. Children now explore - How can these materials be manipulated? How do their features make them suitable for a given job?	This unit builds on children's experience of plants and their parts in Year One. Children will deepen their knowledge of plants and their basic needs in order to grow and stay healthy. Having developed aa secure knowledge of seasonal changes both in EYFS and Year One, children will now apply this knowledge to	This unit extends children's knowledge of beyond that gained in Year One to name common plants, where they grow and how they provide food for different creatures. They will learn about and investigate microhabitats.	Further extending the knowledge gained from Term Five – Children will looked at the needs of one animal and learn about food chains, specifically how each animal links together within a food chain?

				understand the impact of seasons on the growth of plants and trees.		
	Vocabulary, Key Concepts/Skills					
	Offspring, reproduction, growth, child, young/old stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly), exercise, heartbeat, breathing, hygiene, germs, disease, food types (examples – meat, fish, vegetables, bread, rice, pasta) To ask simple questions and recognising that they can be answered in different ways. To observe closely, using simple equipment. To perform simple tests. To identify and classify. To use their observations and ideas to suggest answers to questions. To gather and record data to help in answering questions.	Survival, air, water, shelter, living, dead, never been alive, extinct. To ask simple questions and recognising that they can be answered in different ways. To observe closely, using simple equipment. To perform simple tests. To identify and classify. To use their observations and ideas to suggest answers to questions.	Wood Plastic Glass Metal Water Rock Hard/soft Stretchy/ stiff Shiny/dull Rough/ smooth Bendy Waterproof Absorbent To ask simple questions and recognising that they can be answered in different ways. To observe closely, using simple equipment. To perform simple tests. To identify and classify. To use their observations and ideas to suggest answers to questions. To gather and record data to help in answering questions.	Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, bulb, temperature, germination, nutrients To ask simple questions and recognising that they can be answered in different ways. To observe closely, using simple equipment. To perform simple tests. To identify and classify. To use their observations and ideas to suggest answers to questions. To gather and record data to help in answering questions.	Suited, suitable, basic needs, food, food chain, shelter, move, feed. Names of local habitats e.g. pond, woodland etc. Names of micro-habitats e.g. under logs, in bushes etc. To ask simple questions. To observe closely, using simple equipment. To identify and classify.	Suited, suitable, basic needs, food, food chain, shelter, move, feed. Names of local habitats e.g. pond, woodland etc. Names of micro-habitats e.g. under logs, in bushes etc. To ask simple questions. To observe closely, using simple equipment. To identify and classify.