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Early Years Development Matters statements		**Year 1 Animals including humans**	**Year 2 Animals including humans**	**Year 3 Animals including humans**	**Year 4 Animals including humans**	**Year 5 Animals including humans**	**Year 6 Animals including humans**
• Begin to make sense of their own life-story and family's history.. • Make connections between the features of their family and other families.	**Vocabulary used *(clearly used in books and on Working walls)***	Fish, Reptiles, Mammals, Birds, Amphibians (+ examples of each) Herbivore, Omnivore, Carnivore, Leg, Arm, Elbow, Head, Ear, Nose, Back, Wings, Beak Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves	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)	Nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, support, protect, move, skull, ribs, spine, muscles, joints	Mouth, Tongue, Teeth, Oesophagus, Stomach, Small Intestine, Large Intestine, Herbivore, Carnivore, Canine, Incisor, Molar	Foetus, Embryo, Womb, Gestation, Baby, Toddler, Teenager, Elderly, Growth, Development, Puberty	Heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs and lifestyle
	National Curriculum Objectives	1. identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals 2. identify and name a variety of common animals that are carnivores, herbivores and omnivores 3. describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)	1. notice that animals, including humans, have offspring which grow into adults 2. find out about and describe the basic needs of animals, including humans, for survival (water, food and air) 3. describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	1. identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat 2. identify that humans and some other animals have skeletons and muscles for support, protection and movement	1. describe the simple functions of the basic parts of the digestive system in humans 2. identify the different types of teeth in humans and their simple functions 3. construct and interpret a variety of food chains, identifying producers, predators and prey	1. describe the changes as humans develop to old age	1. identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood 2. recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function 3. describe the ways in which nutrients and water are transported within animals, including humans

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	Knowledge **Key Learning**	Animals vary in many ways having different structures e.g. wings, tails, ears etc. They also have different skin coverings e.g. scales, feathers, hair. These key features can be used to identify them. Animals eat certain things - some eat other animals, some eat plants, some eat both plants and animals. *Names of animals experienced first-hand from each vertebrate group N.B. The children need to be able to name and identify a range of animals in each group e.g. name specific birds and fish. They do not need to use the terms mammal, reptiles etc. or know the key characteristics of each, although they will probably be able to identify birds and fish, based on their characteristics. The children also do not need to use the words carnivore, herbivore and omnivore. If they do, ensure that they understand that carnivores eat other animals not just meat.	Animals including humans have offspring which grow into adults. In humans and some animals these offspring will be young, such as babies or kittens, that grow into adults. In other animals, such as chickens or insects, there may be eggs laid that hatch to young or other stages which then grow to adults. The young of some animals do not look like their parents e.g. tadpoles. All animals including humans have basic needs of feeding, drinking and breathing that must be satisfied in order to survive, and to grow into healthy adults they also need the right amounts and types of food and exercise. Good hygiene is also important in preventing infections and illnesses. -	Animals, unlike plants which can make their own food, need to eat in order to get the nutrients they need. Food contains a range of different nutrients that are needed by the body to stay healthy – carbohydrates including sugars, protein, vitamins, minerals, fibre, fat, sugars, water. A piece of food will often provide a range of nutrients. Humans and some other animals have skeletons and muscles which help them move and provide protection and support	Food enters the body through the mouth. Digestion starts when the teeth start to break the food down. Saliva is added and the tongue rolls the food into a ball. The food is swallowed and passes down the oesophagus to the stomach. Here the food is broken down further by being churned around and other chemicals are added. The food passes into the small intestine. Here nutrients are removed from the food and leave the digestive system to be used elsewhere in the body. The rest of the food then passes into the large intestine. Here the water is removed for use elsewhere in the body. What is left is then stored in the rectum until it leaves the body through the anus when you go to the toilet. Humans have four types of teeth - incisors for cutting, canines for tearing, molars and premolars for grinding (chewing). Living things can be classified as producers, predators and prey according to their place in the food chain.	When babies are young they grow rapidly. They are very dependent on their parents. As they develop they learn many skills. At puberty, a child's body changes and develops primary and secondary sexual characteristics. This enables the adult to reproduce. This needs to be taught alongside PSHE Useful guidance can be obtained at: http://www.ase.org.uk/news/aseviews/teaching-about-puberty/ http://www.ase.org.uk/documents/2016-joint-statement-on-reproduction/	The heart pumps blood in the blood vessels around to the lungs. Oxygen goes into the blood and carbon dioxide is removed. The blood goes back to the heart and is then pumped around the body. Nutrients, water and oxygen are transported in the blood to the muscles and other parts of the body where they are needed. As they are used they produce carbon dioxide and other waste products. Carbon dioxide is carried by the blood back to the heart and then the cycle starts again as it is transported back to the lungs to be removed from the body. This is the human circulatory system. Diet, exercise, drugs and lifestyle have an impact on the way our bodies function. They can affect how well out heart and lungs work, how likely we are to suffer from conditions such as diabetes, how clearly we think, and generally how fit and well we feel. Some conditions are caused by deficiencies in our diet e.g. lack of vitamins.
	Understanding at the expected standard	Can name a range of animals which includes animals from each of the vertebrate groups Can describe the key features of these named animals Can label key features on a picture/diagram Can write descriptively about an animal Can write a What am I? riddle about an animal - Can describe what a range of animals eat	Can describe how animals including humans have offspring which grow into adults, using the appropriate names for the stages Can state the basic needs of animals, including humans, for survival. Can state the importance for humans of exercise, eating the right amounts of different types of food and hygiene. Can name foods in each section of the Eatwell guide.	Can name the nutrients found in food Can state that to be healthy we need to eat the right types of food to give us the correct amount of these nutrients Can name some bones that make up their skeleton giving examples that support, help them move or provide protection Can describe how muscles and joints help them to move	Can sequence the main parts of the digestive system Can draw the main parts of the digestive system onto a human outline Can describe what happens in each part of the digestive system Can point to the three different types of teeth in their mouth and talk about their shape and what they are used for Can name producers, predators and prey within a habitat Can construct food chains	Can explain the changes that takes place in boys and girls during puberty Can explain how a baby changes physically as it grows and also what it is able to do	Can draw a diagram of the circulatory system and label the parts and annotate it to show what the parts do Produces a piece of writing that demonstrates the key knowledge e.g. explanation text, job description of the heart

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	<u>Understanding at greater depth</u>	Can sort and group animals using similarities and differences Can use simple charts etc. to identify unknown animals Can create a drawing of an imaginary animal labelling its key features - Can use secondary resources to find out what animals eat, including talking to experts e.g. pet owners, zoo keepers etc.	Can describe, including using diagrams, the life cycle of some animals, including humans, and their growth to adults e.g. by creating a life cycle book for a younger child Can measure/observe how animals, including humans, grow. Show what they know about looking after a baby/animal by creating a parenting/pet owners' guide Explain how development and health might be affected by differing conditions and needs being met/not met.	Can classify food into those that are high or low in particular nutrients Can state that to be healthy we need to eat the right types of food to give us the correct amount of these nutrients Can name some bones that make up their skeleton giving examples that support, help them move or provide protection Can describe how muscles and joints help them to move Can answer their questions about nutrients in food based on their gathered evidence Can talk about the nutrient content of their daily diet Use their data to look for patterns (or lack of) when answering their enquiry question • Can give similarities e.g. they all have joints to help the animal move, and differences between skeletons • • Explain why a varied diet is important. • Identify that humans and some other animals have skeletons and muscles for support, protection and movement and suggest reasons as to the benefits for some animals having the type of skeletons they do.	• Can use diagrams or a model to describe the journey of food through the body explaining what happens in each part. • Can record the teeth in their mouth (make a dental record) • Can explain the role of the different types of teeth • Can explain how the teeth in animal skulls show they are carnivores, herbivores or omnivores. • Can create food chains based on research.	• Why some changes that take place in humans happen.e.g. why babies have disproportionately large he	• Create a role play model for the circulatory system • Carry out a range of pulse rate investigations • Fair test – effect of different activities on my pulse rate • Pattern seeking – exploring which groups of people may have higher or lower resting pulse rates • Observation over time - how long does it take my pulse rate to return to my resting pulse rate (recovery rate) • Pattern seeking – exploring recovery rate for different groups of people • Learn about the impact of exercise, diet, drugs and lifestyle on the body. This is likely to be taught through direct instruction due to its sensitive nature

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	Working scientifically skills	Make first hand close observations of animals from each of the groups Compare two animals from the same or different group Classify animals using a range of features Identify animals by matching them to named images - Classify animals according to what they eat	Ask people questions and use secondary sources to find out about the life cycles of some animals Observe animals growing over a period of time e.g. chicks, caterpillars, a baby Ask questions of a parent about how they look after their baby Ask pet owners questions about how they look after their pet Explore the effect of exercise on their bodies Classify food in a range of ways, including using the Eatwell guide Investigate washing hands, using glitter gel	Classify food in a range of ways Use food labels to explore the nutritional content of a range of food items Use secondary sources to find out they types of food that contain the different nutrients Use food labels to answer enquiry questions e.g. How much fat do different types of pizza contain? How much sugar is in soft drinks? Plan a daily diet contain a good balance of nutrients Explore the nutrients contained in fast food Use secondary sources to research the parts and functions of the skeleton Investigate pattern seeking questions such as • Can people with longer legs run faster? • Can people with bigger hands catch a ball better? Compare, contrast and classify skeletons of different animals •	Research the function of the parts of the digestive system Create a model of the digestive system using household objects Explore eating different types of food, to identify which teeth are being used for cutting, tearing and grinding (chewing) Classify animals as herbivores, carnivores or omnivores according to the type of teeth they have in their skulls Use food chains to identify producers, predators and prey within a habitat Use secondary sources to identify animals in a habitat and find out what they eat.	• Observe, describe and compare in careful detail • Sort and classify with precise reasons • Begin to identify scientific evidence that has been used to support or refute ideas or arguments • Select the most appropriate way to communicate findings, evaluating the evidence as well as describing it • Talk about how to improve their own work giving reasons. • This unit is likely to be taught through direct instruction due to its sensitive nature	• Can draw a diagram of the circulatory system and label the parts and annotate it to show what the parts do • Produces a piece of writing that demonstrates the key knowledge e.g. explanation text, job description of the heart
	Maths in science reference	Maths in Science Reference 1.3	Maths in Science Reference 2.3	N/A	N/A	N/A	Maths in Science Reference 6.1

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Early Years Development Matters statements		Year 1 Plants	Year 2 Plants	Year 3 Plants	Year 4 Living things and their habitats	Year 5 Living things and their habitats	Year 6 Living things and their habitats
• Plant seeds and care for growing plants. • Understand the key features of the life cycle of a plant and an animal. • Begin to understand the need to respect and care for the natural environment and all living things.	**Vocabulary used** ***(clearly used in books and on Working walls)***	Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud Names of trees in the local area Names of garden and wild flowering plants in the local area	As for year 1 plus - light, shade, sun, warm, cool, water, grow, healthy	Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal – wind dispersal, animal dispersal, water dispersal	Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate	Life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings	Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering and non-flowering
	National Curriculum Objectives	1. identify and name a variety of common wild and garden plants, including deciduous and evergreen trees 2. identify and describe the basic structure of a variety of common flowering plants, including trees	1. observe and describe how seeds and bulbs grow into mature plants 2. find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	1. identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers 2. explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant 3. investigate the way in which water is transported within plants 4. explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal	1. recognise that living things can be grouped in a variety of ways 2. explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment 3. recognise that environments can change and that this can sometimes pose dangers to living things	1. describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird 2. describe the life process of reproduction in some plants and animals	1. describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals 2. give reasons for classifying plants and animals based on specific characteristics
	Knowledge Key Learning	- Growing locally there will be a vast array of plants which all have specific names. - These can be identified by looking at the key characteristics of the plant. - Plants have common parts but they vary between the different types of plants. Some trees keep their leaves all year whilst other trees drop their leaves during autumn and grow them again during spring.	Plants may grow from either seeds or bulbs. These then germinate and grow into seedlings which then continue to grow into mature plants. These mature plants may have flowers which then develop into seeds, berries, fruits etc. Seeds and bulbs need to be planted outside at particular times of the year and they will germinate and grow at different rates. Some plants are better suited to growing in full sun and some grow better in partial or full shade. Plants also need different amounts of water and space to grow well and stay healthy.	Many plants, but not all, have roots, stems/trunks, leaves and flowers/blossom. The roots absorb water and nutrients from the soil and anchor the plant in place. The stem transports water and nutrients/minerals around the plant and holds the leaves and flowers up in the air to enhance photosynthesis, pollination and seed dispersal. The leaves use sunlight and water to produce the plant's food. Some plants produce flowers which enable the plant to reproduce. Pollen, which is produced by the male part of the flower, is transferred to the female part of other flowers (pollination). This forms seeds, sometimes contained in berries or fruits which are then dispersed in different ways. Different plants require different conditions for germination and growth	Living things can be grouped (classified) in different ways according to their features. Classification keys can be used to identify and name living things. Living things live in a habitat which provides an environment to which they are suited (year 2 learning). These environments may change naturally e.g. through flooding, fire, earthquakes etc. Humans also cause the environment to change. This can be in a good way i.e. positive human impact, such as setting up nature reserves or in a bad way i.e. negative human impact, such as littering. These environments also change with the seasons; different living things can be found in a habitat at different times of the year	As part of their life cycle plants and animals reproduce. Most animals reproduce sexually. This involves two parents where the sperm from the male fertilises the female egg. Animals including humans have offspring which grow into adults. In humans and some animals these offspring will be born live, such as babies or kittens, and then grow into adults. In other animals, such as chickens or snakes, there may be eggs laid that hatch to young which then grow to adults. Some young undergo a further change before becoming adults e.g. caterpillars to butterflies. This is called a metamorphosis. Plants reproduce both sexually and asexually. Bulbs, tubers, runners and plantlets are examples of asexual plant reproduction which involves only one parent. Gardeners may force plants to reproduce asexually by taking cuttings. Sexual reproduction occurs through pollination, usually involving wind or insects.	Living things can be formally grouped according to characteristics. Plants and animals are two main groups but there are other livings things that do not fit into these groups e.g. micro-organisms such as bacteria and yeast, and toadstools and mushrooms. Plants can make their own food whereas animals cannot. Animals can be divided into two main groups – those that have backbones (vertebrates) and those that do not (invertebrates). Vertebrates can be divided into five small groups – fish, amphibians, reptiles, birds and mammals. Each group has common characteristics. Invertebrates can be divided into a number of groups including insects, spiders, snails and worms. Plants can be divided broadly into two main groups – flowering plants and non-flowering plants.

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	Understanding at the expected standard	• Can name trees and other plants that they see regularly • Can describe some of the key features of these trees and plants e.g. the shape of the leaves, the colour of the flower/blossom • Can point out trees which lost their leaves and those that kept them the whole year • Can point to and name the parts of a plant, recognising that they are not always the same e.g. leaves and stems may not be green	Can describe how plants that they have grown from seeds and bulbs have developed over time • Can identify plants that grew well in different conditions	Can explain the function of the parts of a flowering plant Can describe the life cycle of flowering plants, including pollination, seed formation, seed dispersal, and germination Can give different methods of pollination and seed dispersal, including examples	Can name living things living in a range of habitats, giving the key features that helped them to identify them • Can give examples of how an environment may change both naturally and due to human impact	Can draw the life cycle of a range of animals identifying similarities and differences between the life cycles Can explain the difference between sexual and asexual reproduction and give examples of how plants reproduce in both ways	Can give examples of animals in the five vertebrate groups and some of the invertebrate groups Can give the key characteristics of the five vertebrate groups and some invertebrate groups Can compare the characteristics of animals in different groups Can give examples of flowering and non-flowering plants
	Understanding at greater depth	• Identify and notice similarities between various local plants and the structure of them. • Research further examples to add to the categories: 'living', 'dead' and 'things that have never been alive'.	Can spot similarities and difference between bulbs and seeds Can nurture seeds and bulbs into mature plants identifying the different requirements of different plants •	Can explain observations made during investigations Can look at the features of seeds to decide on their method of dispersal Can draw and label a diagram of their created flowering plant to show its parts, their role and the method of pollination and seed dispersal	Can keep a careful record of living things found in different habitats throughout the year (diagrams, tally charts etc.) Can use classification keys to identify unknown plants and animals • Can present their learning about changes to the environment in different ways e.g. campaign video, persuasive letter	Can present their understanding of the life cycle of a range of animals in different ways e.g. drama, pictorially, chronological reports, creating a game Can identify patterns in life cycles Can compare two or more animal life cycles studied Can explain how a range of plants reproduce asexually	Can use classification materials to identify unknown plants and animals Can create classification keys for plants and animals Can give a number of characteristics that explain why an animal belongs to a particular group
-	Working scientifically skills	- Make close observations of leaves, seeds, flowers etc. - Compare two leaves, seeds, flowers etc. - Classify leaves, seeds, flowers etc. using a range of characteristics - Identify plants by matching them to named images - Make observations of how plants change over a period of time - When further afield, spot plants that are the same as those in the local area studied regularly, describing the key features that helped them. - Can sort and group parts of plants using similarities and differences - Can use simple charts etc. to identify plants - Can collect information on features that change during the year - Can use photographs to talk about how plants change over time	Make close observations of seeds and bulbs Classify seeds and bulbs Research and plan when and how to plant a range of seeds and bulbs Look after the plants as they grow – weeding, thinning, watering etc. Make close observations and measurements of their plants growing from seeds and bulbs Make comparisons between plants as they grow	Observe what happens to plants over time when the leaves or roots are removed Observe the effect of putting cut white carnations or celery in coloured water Investigate what happens to plants when they are put in different conditions e.g. in darkness, in the cold, deprived of air, different types of soil, different fertilisers, varying amount of space Spot flowers, seeds, berries and fruits outside throughout the year Observe flowers carefully to identify the pollen Observe flowers being visited by pollinators e.g. bees and butterflies in the summer Observe seeds being blown from the trees e.g. sycamore seeds Research different types of seed dispersal Classify seeds in a range of ways including by how they are dispersed • Create a new species of flowering plant	Observe plants and animals in different habitats throughout the year Compare and contrast the living things observed Use classification keys to name unknown living things Classify living things found in different habitats based on their features Create a simple identification key based on observable features Use fieldwork to explore human impact on the local environment e.g. litter, tree planting Use secondary sources to find out about how environments may naturally change Use secondary sources to find out about human impact, both positive and negative, on environments	Use secondary sources and, where possible, first hand observations to find out about the life cycle of a range of animals Compare the gestation times for mammals and look for patterns e.g. in relation to size of animal or length of dependency after birth Look for patterns between the size of an animal and its expected life span Grow and observe plants that reproduce asexually e.g. strawberries, spider plant, potatoes Take cuttings from a range of plants e.g. African violet, mint Plant bulbs and then harvest to see how they multiply Use secondary sources to find out about pollination	Use secondary sources to learn about the formal classification system devised by Carl Linnaeus and why it is important Use first hand observation to identify characteristics shared by the animals in a group Use secondary sources to research the characteristics of animals that belong to a group Use information about the characteristics of an unknown animal or plant to assign it to a group Classify plants and animals presenting this in a range of ways – Venn diagrams, Carroll diagrams and keys Create an imaginary animal which has features from one or more groups
	Maths in science reference	Maths in Science Reference 1.1	2.2	3.1			

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Early Years **Development Matters statements**		**Year 1** **Humans**	**Year 2** **Living things and their habitats**	**Year 6** **Evolution and inheritance**
• Explore the natural world around them. • Provide children with have frequent opportunities for outdoor play and exploration. • 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.	**Vocabulary used** ***(clearly used in books and on Working walls)***	Senses, touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue	Living, dead, never been alive, 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.	Offspring, sexual reproduction, vary, characteristics, suited, adapted, environment, inherited, species, fossils
	National Curriculum Objectives	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	1. explore and compare the differences between things that are living, dead, and things that have never been alive 2. 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 3. 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	1. recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago 2. recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents 3. identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution
	Knowledge **Key Learning**	Humans have keys parts in common, but these vary from person to person. Humans (and other animals) find out about the world using their senses. Humans have five senses – sight, touch, taste, hearing and smelling. These senses are linked to particular parts of the body.	All objects are either living, dead or have never been alive. Living things are plants (including seeds) and animals. Dead things include dead animals and plants and parts of plants and animals that are no longer attached e.g. leaves and twigs, shells, fur, hair and feathers (this is a simplification but appropriate for year 2 children). An object made of wood is classed as dead. Objects made of rock, metal and plastic have never been alive (again ignoring that plastics are made of fossil fuels). Animals and plants live in a habitat to which they are suited which means that animals have suitable features that help them move and find food and plants have suitable features that help them to grow well. The habitat provides the basic needs of the animals and plants – shelter, food and water. Within a habitat there are different micro-habitats e.g. in a woodland – in the leaf litter, on the bark of trees, on the leaves. These micro-habitats have different conditions e.g. light or dark, damp or dry. These conditions affect what plants and animals live there. The plants and animals in a habitat depend on each other for food and shelter etc. The way that animals obtain their food from plants and other animals can be shown in a food chain.	All living things have offspring of the same kind, as features in the offspring are inherited from the parents. Due to sexual reproduction, the offspring are not identical to their parents and vary from each other. Plants and animals have characteristics that make them suited (adapted) to their environment. If the environment changes rapidly some variations of a species may not suit the new environment and will die. If the environment changes slowly, animals and plants with variations that are best suited survive in greater numbers to reproduce and pass their characteristics on to their young. Over time these inherited characteristics become more dominant within the population. Over a very long period of time these characteristics may be so different to how they were originally that a new species is created. This is evolution. Fossils give us evidence of what lived on the Earth millions of year ago and provide evidence to support the theory of evolution. More recently scientists such as Darwin and Wallace observed how living things adapt to different environments to become distinct varieties with their own characteristics.
	Understanding at the expected standard	Can play and lead 'Simon says'. During PE lessons, can follow instructions involving parts of the body Can label parts of the body on pictures and diagrams Can explore objects using different senses	Can find a range of items outside that are living, dead and never lived Can name a range of animals and plants that live in a habitat and micro-habitats that they have studied Can talk about how the features of these animals and plants make them suitable to the habitat Can talk about what the animals eat in a habitat and how the plants provide shelter for them Can construct a food chain that starts with a plant and has the arrows pointing in the correct direction	Can explain the process of evolution Can give examples of how plants and animals are suited to an environment Can give examples of how an animal or plant has evolved over time e.g. penguin, peppered moth Give examples of living things that lived millions of years ago and the fossil evidence we have to support this Can give examples of fossil evidence that can be used to support the theory of evolution
	Understanding at greater depth	Can use first-hand close observations to make detailed drawings Can name body parts correctly when talking about measurements and comparisons 'My arm is x straws long.' 'My arm is x straws long and my leg is y straws long. My leg is longer than my arm.' 'We both have hands, but his are bigger than mine.'	Can sort into living, dead and never lived Can give key features that mean the animal or plant is suited to its micro-habitat Using a food chain can explain what animals eat Can explain in simple terms why an animal or plant is suited to a habitat e.g. the caterpillar cannot live under the soil like a worm as it needs fresh leaves to eat; the	Can identify characteristics that will make a plant or animal suited or not suited to a particular habitat Can link the patterns seen in the model to the real examples Can explain why the dominant colour of the peppered moth changed over a very short period of time

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		'These people have brown eyes and these have blue.' Can talk about their findings from investigations using appropriate vocabulary 'My fingers are much better at feeling than my toes' 'We found that the crisps all taste the same.'	seaweed we found on the beach cannot live in our pond because it is not salty	
	Working scientifically skills	Make first hand close observations of parts of the body e.g. hands, eyes Compare two people Take measurements of parts of their body Compare parts of their own body Look for patterns between people e.g. Do people with big hands have big feet? Classify people according to their features Investigate human senses e.g. Which part of my body is good for feeling, which is not? Which food/flavours can I identify by taste? Which smells can I match?	Explore the outside environment regularly to find objects that are living, dead and have never lived Classify objects found in the local environment Observe animals and plants carefully, drawing and labelling diagrams Create simple food chains for a familiar local habitat from first hand observation and research Create simple food chains from information given e.g. in picture books (Gruffalo etc.)	Design a new plant or animal to live in a particular habitat Use models to demonstrate evolution e.g. Darwin's finches bird beak activity Use secondary sources to find out about how the population of peppered moths changed during the industrial revolution Make observations of fossils to identify living things that lived on Earth millions of years ago Identify features in animals and plants that are passed on to offspring Explore this process by considering the artificial breeding of animals or plants e.g. dogs Compare the ideas of Charles Darwin and Alfred Wallace on evolution Research the work of Mary Anning and how this provided evidence of evolution
	Maths in science reference		2.1	6.2