Science Knowledge Progression Overview

Coverage and Progression	F1	F2	Yr 1	Yr 2	Yr 2 Exceeding
Working Scientifically	**I can show curiosity and ask questions.** While playing and exploring, the children demonstrate their curiosity. While playing and exploring, with suppot the children begin to ask 'I wonder …' questions. With support, the children think of ideas for answering their questions. **I can make observations using my senses and simple equipment.** **I can make direct comparisons.** **I can identify, sort and group.** With support the children explore the natural and made world using their senses. With support the children use magnifying glasses to make observations. The children explore using beakers/scoops etc Children make simple comparisons between objects and quantities. While playing and exploring, the children select and use resources for a particular task. With support, the children sort and group objects. **I can record my observations by drawing, taking photographs and using sorting rings.** With support, the children talk about what they have observed. They sometimes draw and make marks to record their observations. With support, they use sorting rings. **I can use my observations to help me answer my questions.** With support, the children demonstrate and talk about what they have done and noticed. With support, the children notice how they made a difference to an outcome, and answer the question, where appropriate. With support, the children make comparisons between objects	**I can show curiosity and ask questions.** While playing and exploring, the children begin to ask 'I wonder…' questions. With support, the children develop their ideas for answering their questions. **I can make observations using my senses and simple equipment.** **I can make direct comparisons.** **I can identify, sort and group.** Children explore the natural and made world using their senses. The children use magnifying glasses to make observations. The children use smaller pieces of equipment such as syringes and pipettes. With support, make comparisons, using hands and feet and other non-standard measures e.g. building blocks and beakers. While playing and exploring, the children, try out using resources to answer a question. The children test things out to make comparisons e.g. Does the red car go further than the blue car? They identify and name objects by matching them with pictures. The children sort and group objects, sometimes using their own criteria. **I can record my observations by drawing, taking photographs and using sorting rings.** **I can record by using a simple tick sheet.** The children, sometimes, draw and write simple labels to record their observations. With support, they record their observations and comparisons e.g. using simple prepared tables, taking photographs, using sorting rings.	**I know how to ask simple questions and recognise that they can be answerd in different ways.** I know how to ask and answer a simple question. With support I am beginning to generate questions for further equiry. I know how to plan to use the resources provided to answer questions using different types of scientific enquiry with support. **I know how to observe closely, using simple equipment.** I know how make careful observations to support identification, comparison and noticing change. I know how to use a magnifying glass to make detailed observations. I know how to measure by comparing and using non-standard units. I know how to measure using standard units with support. **I know how to perform a simple test with support.** I know how to use the resources provided to gather evidence to answer questions with support. **I know how to identify and classify.** I know how to use my observations and testing to compare objects, materials and living things. I know how to sort and group objects, materials and living things using identifed criteria. I am beginning to use my own criteria for sorting. I know how to use simple secondary sources to name living thigns with support. I can describe the characteristics I used to identify a living thing with support. **I know how to record and present evidence.** I can gather and record data to help in answering questions with support. I know how to record my observations in different ways such as drawing,	**I know how to ask simple questions and recognise that they can be answerd in different ways.** I am generating questions for further equiry with increasing independence. I know how to plan to use the resources provided to answer questions using different types of scientific enquiry with increasing independence. **I know how to observe closely, using simple equipment.** I know how to use a microscope. I know how to measure by comparing and using standard units. **I know how to perform a simple test.** I know how to use the resources provided to gather evidence to answer questions with increasing independence. **I know how to identify and classify.** I know how to use my observations and testing to compare objects, materials and living things. I know how to sort and group objects, materials and living things using identifed criteria. I can identify and use my own criteria for sorting. I know how to use simple secondary sources to name living thigns with increasing independence. I can describe the characteristics I used to identify a living thing in greater detail and with increasing independence.	**I know how to ask questions and can answer them in different ways.** I can generste my own question for further enquiry independently. I know how to plan to use the resources provided to answer questions using different types of scientific enquiry independently. **I know how to observe closely, using simple equipment.** I can make detailed observations. I can measure and compare accurately. **I know how to perform a simple test.** I know how to use resources to gather evidence to answer questions and give explanations. **I know how to identify and classify.** I know how to use secondary sources independently. I can give detailed reasons for and explain my own criteria for sorting and classifying drawing upon my knowledge. **I know how to record and present evidence**. I can suggest appropriate ways to record and present

		I can use my observations to help me answer my questions. The children talk about what they have observed. The children demonstrate and talk about what they have found out. They, sometimes, talk about what they have found out from secondary sources, including non-fiction texts. The children notice and talk about how they made a difference to an outcome The children make direct comparisons or use their recorded observations to communicate what they have found out and answer the question, where appropriate.	labelled diagrams or writing with support. I know how to record measurements and observations with support using prepared tables, pictograms, tally charts and block graphs. I know how to classify using simple prepared tables and sorting rings with support. **I can answer questions and draw simple conclusions.** I can use my observations and ideas to suggest answers to questions. I can relate my answers to the evidence I have gathered with support. I can use my data to recognise biggest/smallest, best/worst with support.	**I know how to record and present evidence**. I can gather and record data to help in answering questions with increasing independence. I can suggest a suitable way to record my observations such as drawing, labelled diagrams or writing. I know how to record measurements and observations with increasing independece using prepared tables, pictograms, tally charts and block graphs. I know how to classify using simple prepared tables and sorting rings with increasing independence. **I can answer questions and draw conclusions.** I can use my observations and ideas to suggest appropriate answers to questions. I can relate my answers to the evidence I have gathered with increasing independence. I can relate my answers to the evidence I have gathered with support. I can use my data to recognise biggest/smallest, best/worst with increasing independence.	evidence and data such as drawing, labelled diagrams writing, tables, block graphs etc. I know how to create my own charts, tables, block graphs, pictograms etc **I can answer questions and draw conclusions.** I can give detailed reasons and explainations, drawing on my own knowledge, when answering questions and making conclusions.
Vocab Working scientifically	Science, scientist, investigate, find out, I see, I notice, I wonder look closely, observe, watch, touch, feel, smell, listen, same, different, compare, ask questions, record, sort, group, change, magnifying glass pipette, syringe,	Science, scientist, investigate, find out, I see, I notice, I wonder change, measure, record, draw, label, tick, magnifying glass, name, predict, pipette, syringe, look closely, observe, watch, touch, feel, smell, listen, same, different, compare, ask questions, record, sort, group	Science, scientist, investigate, find out, I see, I notice, I wonder observe, changes, patterns, grouping, sorting, compare, same, different, identify (name), measure, data, record results, drawing, picture, table, tally chart, present, pictogram, block chart, Venn diagram, ask questions, test, explore, equipment, resources, magnifying glass, hand lens, ruler, tape measure, metre stick, pipette, syringe, spoon, teaspoon, answer questions, interpret results, scientific enquiry, pattern seeking, comparative testing, observing over time, classifying, researching using secondary sources	Science, scientist, investigate, find out, I see, I notice, I wonder observe, changes, patterns, grouping, sorting, compare, same, different, identify (name), measure, data, record results, drawing, picture, table, tally chart, present, pictogram, block chart, Venn diagram, ask questions, test, explore, equipment, resources, magnifying glass, hand lens, ruler, tape measure, metre stick, pipette, syringe, spoon, teaspoon, answer questions, interpret results, scientific enquiry, pattern seeking, comparative testing, observing over time, classifying, researching using secondary sources	
Curriculum link	**EYFS**		**NC**		
	Characteristics of Effective Teaching and Learning • ***playing and exploring*** – children investigate and experience things, and 'have a go'		These opportunities for working scientifically should be provided across years 1 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.		

Working scientifically	• ***active learning*** – children concentrate and keep on trying if they encounter difficulties, and enjoy achievements • ***creating and thinking critically*** – children have and develop their own ideas, make links between ideas, and develop strategies for doing things **ELGs** ***Listening, Attention and Understanding ELG*** Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions; Make comments about what they have heard and ask questions to clarify their understanding; Hold conversation when engaged in back-and-forth exchanges with their teacher and peers. ***Speaking ELG*** Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary; Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate; Express their ideas and feelings about their experiences using full sentences, including use of past, present, and future tenses and making use of conjunctions, with modelling and support from their teacher.	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. 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. They should ask people questions and use simple secondary sources to find answers. 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.

Coverage and Progression	F1	F2	Yr 1	Yr 2	Yr 2 Exceeding
Animals including humans Key skills Biology	I can use all my senses in hands-on exploration of natural materials indoors and outside. I am begining to notice differences between people. I can name some animals. I am beginning to understand the key features of the life cycle of a plant and an animal. I can name some animals. I am beginning to understand the need to respect and care for the natural environment and all living things.	I can talk about members of my immediate family and community. I can name and describe people who are familiar to me. I can make connections between the features of my family and other families. I can recognise some environments that are different to the one in which I live. I can name some animals and know what the offspring are called. I can understand key features of the life cycle of a plant and an animal.	I know how to identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. I know how to identify and name a variety of common animals that are carnivores, herbivores and omnivores. I know how to describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). I know how 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.	I know that animals, including humans, have offspring which grow into adults. I know how to find out about and describe the basic needs of animals, including humans, for survival (water, food and air). I know and can describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	I can explain why the basic needs of animals including humans are important for survival.
Vocab Animals including humans	egg, chick, bird, caterpillar, cocoon, chrysalis, butterfly, frog spawn, tadpole, froglet, frog, grow, change, die, names of animals and their young, fur, feathers, scales, tail, wings, beak, claws, paws, hooves, swim, walk, run, jump, fly, patterns, spots, stripes, grow, change, baby, toddler, child, adult, old person, smell, taste, touch, feel, hear, see,	names of animals, live, on land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice, hair (e.g. black, brown, dark, light, blonde, ginger, grey, white, long, short, straight, curly), eyes (e.g. blue, brown, green, grey), skin (e.g. black, brown, white), big/tall, small/short, bigger/smaller, baby, toddler, child, adult, old person, old, young, brother, sister, mother, father, aunt, uncle, grandmother, grandfather, cousin, friend, family, boy, girl, man, woman	head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, names of animals from each vertebrate group, parts of the body, senses, touch, see, smell, taste, hear, fingers, skin, eyes, nose, ear, tongue	offspring, reproduction, growth, baby, toddler, child, teenager, adult, old person, names of animals and their babies (e.g. chick/hen, kitten/cat, caterpillar/butterfly), survive, survival, water food, air, exercise, heartbeat, breathing, hygiene, germs, disease, food types (e.g. meat, fish, vegetables, bread, rice, pasta, dairy)	
Curriculum link	**EYFS**		**NC**		
	Characteristics of Effective Teaching and Learning • ***playing and exploring*** – children investigate and experience things, and 'have a go' • ***active learning*** – children concentrate and keep on trying if they encounter difficulties, and enjoy achievements • ***creating and thinking critically*** – children have and develop their own ideas, make links between ideas, and develop strategies for doing things. **ELGs** ***Managing Self ELG*** Manage their own basic hygiene and personal needs, including dressing, going to the toilet, and understanding the importance of healthy food choices. ***Gross Motor Skills ELG*** Move energetically, such as running, jumping, dancing, hopping, skipping and climbing. ***The Natural World 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;		Pupils should use the local environment throughout the year to explore and answer questions about animals in their habitat. They should understand how to take care of animals taken from their local environment and the need to return them safely after study. **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.	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. 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. **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.	

	Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.		

Coverage and Progression	F1	F2	Yr 1	Yr 2	Yr 2 Exceeding
Plants **Key skills** **Biology**	I can plant seeds and care for growing plants with support. I am beginning to understand the key features of the life cycle of a plant and an animal. I am beginning to understand the need to respect and care for the natural environment and all living things.	I can explore the natural world around me I can describe what I see, hear and feel whilst outside. I can recognise some environments that are different to the one in which I live. I understand the effect of changing seasons on the natural world around them.	I know and can dentify and name a variety of common wild and garden plants, including deciduous and evergreen trees. I know and can identify and describe the basic structure of a variety of common flowering plants, including trees.	I know and can bserve and describe how seeds and bulbs grow into mature plants. I know and can find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. *I know and can identify and name a variety of plants and animals in their habitats, including microhabitats.*	I can describe the function of different parts of a flowering plant.
Vocab Plants	plant, leaf, stem, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil, names of plants they grow	tree, bush, herb, names of plants they see	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	light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling names of plants in local habitats and micro-habitats	
Curriculum link	**EYFS**		**NC**		
	Characteristics of Effective Teaching and Learning • ***playing and exploring*** – children investigate and experience things, and 'have a go' • ***active learning*** – children concentrate and keep on trying if they encounter difficulties, and enjoy achievements • ***creating and thinking critically*** – children have and develop their own ideas, make links between ideas, and develop strategies for doing things. **ELGs** ***The Natural World 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.		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. **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.	Pupils should use the local environment throughout the year to observe how different plants grow. Pupils should be introduced to the requirements of plants for germination, growth and survival, as well as to the processes of reproduction and growth in plants. Note: Seeds and bulbs need water to grow but most do not need light; seeds and bulbs have a store of food inside them. **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.	

Coverage and Progression	F1	F2	Yr 1	Yr 2	Yr 2 Exceeding

Everyday Materials Key skills Chemistry	I can use all my senses in hands-on exploration of natural and man made materials. I can explore collections of materials with similar and/or different properties. I can talk about the differences between materials and changes I notice Explore and talk about different forces they can feel.	I can explore the natural world around me. I can describe what I see, hear and feel whilst outside. I can explore, investigate and use a variety of different materials for a given purpose/context or that of my own choosing. I can manipulate materials with increasing control. I can select the appropriate resources I need.	I know and can distinguish between an object and the material from which it is made. I know and can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. I know and can describe the simple physical properties of a variety of everyday materials. I know and can compare and group together a variety of everyday materials on the basis of their simple physical properties.	I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	I know that a material comes in different forms and has different properties.
Vocab Everyday Materials	mix, stir, cook, hot, oven, microwave, change, burn, melt, hard, runny, set, freeze, freezer, cold, blended, hard, soft, bendy, stiff, wobbly, wood, plastic, paper, card, fabric, force magnet, push, pull, forwards, backwards	ce, water, frozen, icicle, snow, melt, wet, cold, slippery, smooth, big, bigger, biggest, smaller, smaller, smallest, hard, soft, bendy, rigid, wood, plastic, paper, card, metal, strong, weak, hot, apply heat, waterproof, soggy, not waterproof, best, change, change back	object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through, tansparent, opaque, flexible	names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard properties of materials – as for Year 1 plus opaque, transparent and translucent, reflective, non-reflective, flexible, rigid shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching	
Curriculum link	**EYFS**		**NC**		
	Characteristics of Effective Teaching and Learning • ***playing and exploring*** – children investigate and experience things, and 'have a go' • ***active learning*** – children concentrate and keep on trying if they encounter difficulties, and enjoy achievements • ***creating and thinking critically*** – children have and develop their own ideas, make links between ideas, and develop strategies for doing things. **ELGs** ***The Natural World 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.		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, including for example: brick, paper, fabrics, elastic, foil. **Pupils might work scientifically by:** performing 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?'	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. **Pupils might work scientifically by:** comparing the uses of everyday materials in and around the school with materials found in other places (at 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.

Coverage and Progression	**F1**	**F2**	**Yr 1**	**Yr 2**	**Yr 2 Exceeding**

Seasonal Changes EYFS AND YEAR 1 ONLY Key skills Physics	I can use all my senses in hands-on exploration of natural materials. I am beginning to understand the key features of the life cycle of plant and an animal. I can identify and name different types of weather. I am beginning to understand how the weather affects how I feel, what I wear and what I do. I can talk about the natural changes of plants and the weather I notice outside with support. I am beginning to become aware of the changing seasons.	I can explore the natural world around me. I can describe what they see, hear and feel whilst outside. I can understand the effect of changing seasons on the natural world around me. I am beginning to name the seasons. I can compare and talk about contrasting seasons with support. I can talk about and compare contrasting weather with support.	I can observe changes across the four seasons. I can observe and describe weather associated with the seasons and how day length varies. I can discuss the changes in the seasons and the weather. I can discuss and describe the affect that the changing seasons have on plants and animals.	N/A	N/A
Vocab Seasonal Changes	Sun, rain, clouds, spring, summer, autumn, winter, hot, cold grow, shoot, die, dead (Nursery - Plants) egg, chick, bird, caterpillar, cocoon, chrysalis, butterfly, frog spawn, tadpole, froglet, frog, grow, change, die, names of animals and their young (Nursery - Animals, excluding humans)	spring, summer, autumn, winter, seasons, sunny, cloudy, hot, warm, cold, shower, raining, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, windy, rainbow, animals, young, plants, flowers	weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, Sun, sunrise, sunset, day length,temperature, celcius		
Curriculum link	**EYFS**		**NC**		
	Characteristics of Effective Teaching and Learning • ***playing and exploring*** – children investigate and experience things, and 'have a go' • ***active learning*** – children concentrate and keep on trying if they encounter difficulties, and enjoy achievements • ***creating and thinking critically*** – children have and develop their own ideas, make links between ideas, and develop strategies for doing things. **ELGs** ***The Natural World 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.		Pupils should observe and talk about changes in the weather and the seasons. Note: Pupils should be warned that it is not safe to look directly at the Sun, even when wearing dark glasses. **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.		

Coverage and Progression	**F1**	**F2**	**Yr 1**	**Yr 2**	**Yr 2 Exceeding**

<table>
<tr><td>Living Things and Habitats
<u>YEAR 2 ONLY</u>
Key skills
Biology</td><td>I can use my senses in hands-on exploration of natural materials.I am beginning to understand the need to respect and care for the natural environment and all living things.
I can name some animals that live outside such as farm animals, animals from hot/ cold countries and animals that live in water.
I can talk about animals I might find such as worms, ladybirds, snails, caterpillers and spiders.
I can identify a flower and a tree outside.</td><td>I can explore the natural world around me.
I can describe what they see, hear and feel whilst outside.
I can recognise some environments that are different to the one in which they live.
I know where different animals animals live.
I know where to look for animals such as spiders, snails, worms and ladybirds.
I know that plants grow outside (and inside)</td><td>Links from other areas of the NC
Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (Y1 - Plants) Identify and describe the basic structure of a variety of common flowering plants, including trees. (Y1 - Plants)
Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (Y1 - Animals including humans)
Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 - Animals including humans)
Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). (Y1 – Animals, including humans)
Observe changes across the four seasons. (Y1 - Seasonal change)</td><td>I know and can explore and compare the differences between things that are living, dead, and things that have never been alive.
I know and can 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.
I know and can identify and name a variety of plants and animals in their habitats, including microhabitats.
I know and can 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.
I notice that animals, including humans, have offspring which grow into adults. (Y2 - Animals including humans)</td><td>I can explain the impact that a changing environment would have on plants and animals.
I can explain the impact of an animal or plant becoming unavailable in a food chain.</td></tr>
<tr><td>Vocab Living Things and Habitats</td><td>natural, plant, animal, leaves, seeds, conkers, acorns, twigs, bark, shells, feathers, pebbles, stones, same, different, pattern
plant, leaf, stem, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil</td><td>plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment (e.g. beach, forest)</td><td>names of garden and wild flowering plants in the local area (Y1 - Plants)
head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, names of animals experienced first-hand from each vertebrate group (Y1 - Animals, including humans)
weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, Sun, sunrise, sunset, day length (Y1 - Seasonal changes)</td><td colspan="2">living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, names of local habitats (e.g. pond, woodland etc.), names of micro-habitats (e.g. under logs, in bushes etc.), conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold, names of living things in the habitats and micro-habitats studied</td></tr>
<tr><td>Curriculum link</td><td colspan="2">EYFS</td><td colspan="3">NC</td></tr>
<tr><td></td><td colspan="2">Characteristics of Effective Teaching and Learning
• playing and exploring – children investigate and experience things, and ‘have a go’
• active learning – children concentrate and keep on trying if they encounter difficulties, and enjoy achievements
• creating and thinking critically – children have and develop their own ideas, make links between ideas, and develop strategies for doing things.
ELGs
The Natural World 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.</td><td>Y! N/A</td><td colspan="2">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 ‘micro-habitat’ (a very small habitat, for example for woodlice under stones, logs or leaf litter). They should raise and answer 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 for example: ‘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 micro-habitats (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.</td></tr>
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