

Dobcroft Infant School Curriculum Map



Year	2022-2023
Subject	Science

Whole School Intent: At Dobcroft Infant School, our intent is to create an exceptional, well-sequenced and ambitious curriculum, which challenges and excites all learners. Through quality first teaching and effectively planned provision, children will develop their ability to “know more, remember more and do more” to achieve clear end points.

Subject Intent: To encourage and develop the natural curiosity that all young children have about their world. We believe that it is important to enable children to actively learn by teaching them the skills they need to find answers to questions and increase their scientific knowledge. As they progress through school we seek to develop their ability to carry out their own, independent enquiries and become confident in expressing, and explaining, their own views.

	Autumn	Spring	Summer
FS2- Observing	<p style="color: green;">Linked with seasons and celebrations</p> <p>Children know some similarities and differences between the natural world around them and contrasting environments. This is a key opportunity for critical thinking to be developed</p> <p>Working scientifically</p> <ul style="list-style-type: none"> Asking questions Observations and recording Using their observations and ideas to suggest answers to questions <p>Key words Same, difference, observe, explore, investigate, spot patterns, sensors, environment, similarities, differences</p> <p>Nocturnal, leaves, trees, oak, evergreen, woodland animals</p>	<p style="color: green;">Linked with Who are the hero's? Compare and contrast different environments.</p> <p>Children know about similarities and differences in relation to places, objects, materials and living things.</p> <p>Working scientifically</p> <ul style="list-style-type: none"> Asking questions Observations and recording Using their observations and ideas to suggest answers to questions <p>Key words Same, difference, observe, explore, investigate, spot patterns, sensors, melting, change, heat, hotter, colder, materials</p> <p>Places, materials, wood, plastic, metal, living things</p>	<p style="color: green;">Linked with growing – plants, animals and people Growing sunflowers / observation of catapillars</p> <p>Explore the natural world around them, making observations and drawing pictures of animals and plants.</p> <p>Working scientifically</p> <ul style="list-style-type: none"> Asking questions Observations and recording Using their observations and ideas to suggest answers to questions <p>Key words Same, difference, observe, explore, investigate, spot patterns, sensors, grow, plants, seeds , life cycles</p> <p>Animas, plants, trees, invertebres, insect.</p>
End points	<p>Plants Children will be able to use comparative language to talk about changes in their local environment.</p>	<p>Materials Children will start to develop critical thinking skills and questioning skills based on materials.</p>	<p>Animals/Growth Children will be able to observe and be able to identify some changes in the natural world around them. They will also be able to provide examples from their observation of sunflowers and catapillars.</p>

			<p>Plants/Growth Children will be able to observe the lifecycle of a plant and know some of the things a plant needs to grow.</p>
	<p>Seasonal changes Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. Describe what you see, hear and feel when outside</p> <p>Working scientifically</p> <ul style="list-style-type: none"> • Asking questions • Observations and recording • Using their observations and ideas to suggest answers to questions <p>Key words Same, difference, observe, explore, investigate, spot patterns sensors, seasons, autumn, spring, summer, day, night</p>		
End Point	<p>Seasons Children will be able to identify the different signs of seasons in our local area. They will also be able to name natural objects from the natural area.</p>		
Y1 exploring	<p><u>Plants</u></p> <p>We will identify and name a variety of common wild and garden plants, including evergreen and deciduous trees</p> <p>Working scientifically</p> <ul style="list-style-type: none"> • Asking questions • Observation and recording • Identifying and classifying • Using their observations and ideas to suggest answers to questions <p>Key words deciduous, evergreen, garden plants, wild flowers, common plants.</p>	<p><u>Everyday materials</u></p> <p>We will distinguish between an object and the material from which it is made</p> <p>We will identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> <p>We will describe the simple physical properties of a variety of everyday materials</p> <p>We will compare and group together a variety of everyday materials on the basis of their simple physical properties</p> <p>Working scientifically</p> <ul style="list-style-type: none"> • Asking questions • Observation and recording • Identifying and classifying • Performing simple tests <p>Key words wood, plastic, glass, metal, water, rock, hard/soft, stretchy/stiff, shiny/dull,</p>	<p><u>Plants</u></p> <p>We will identify and name a variety of common wild and garden plants, including evergreen and deciduous trees (Revisit)</p> <p>We will identify and describe the basic structure of a variety of flowering plants, including trees</p> <p>Working scientifically</p> <ul style="list-style-type: none"> • Asking questions • Observation and recording • Identifying and classifying • Using their observations and ideas to suggest answers to questions <p>Key words germination, seeds, bulbs, fruit, stem, root, petals, leaves, deciduous, evergreen, garden plants, wild flowers, common plants.</p> <p><u>Animals</u></p>

		<p>rough/smooth, bendy, waterproof, absorbent</p>	<p>We will identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p> <p>We will identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>We will describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</p> <p>We will identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</p> <p>Working scientifically</p> <ul style="list-style-type: none"> • Asking questions • Observations • Identification and classifying <p>Key words fish, amphibians, reptiles, birds and mammals, amphibians, reptiles, birds carnivores, herbivores and omnivores, taste, smell, vision, touch, hear</p>
<p>End points</p>	<p>Plants Children will be able to know a variety of different wild plants.</p>	<p>Materials Children will be able to explain what a material is and understand that objects are made up of different materials. Children will also be able to give examples of different materials and describe their properties.</p>	<p>Plants Children will be able to identify the basic parts of a plant.</p> <p>Animals Children will be able to identify a variety of different animals and say if they are a herbivore, carnivore or herbivore (and explain how they know). Children will be able to identify the basic parts of a human and explain which part os associated with each sense.</p>
	<p style="text-align: center;"><u>Seasonal changes</u></p> <p>We will observe changes across the 4 seasons</p> <p>We will observe and describe weather associated with the seasons and how day length varies</p> <p>Working Scientifically</p> <ul style="list-style-type: none"> • Asking questions 		

	<ul style="list-style-type: none"> • Observations • Using their observations and ideas to suggest answers to questions • Gathering and recording data to answer questions <p>Key words Season, autumn, winter, spring, summer</p>		
End points	<p style="text-align: center;">Seasons</p> <p>Children will be able to name the 4 seasons in the UK and be able to describe the similarities and differences in these seasons.</p>		
Y2 Comparing	<p><u>Living things and their habitats</u></p> <p>We will explore and compare the differences between things that are living, dead, and things that have never been alive</p> <p>We will describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p> <p>We will identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other</p> <p>We will identify and name a variety of plants and animals in their habitats, including micro-habitats</p> <p>Working Scientifically</p> <ul style="list-style-type: none"> • Asking questions • Observations • Identifying and classifying • Using their observations and ideas to suggest answers to questions <p>Key words Living, dead, never alive, habitats, micro – habitats, food, food chain, woodland, ocean, rainforest,</p> <p><u>Uses of everyday materials</u></p>	<p><u>Animals</u></p> <p>We will find out about the basic needs of animals, including humans, for survival (water, food and air)</p> <p>Working Scientifically</p> <ul style="list-style-type: none"> • Asking questions • Observations • Identifying and classifying • Using their observations and ideas to suggest answers to questions <p>Key words Movement, Respiration, sensitivity, nutrition, excretion, reproduction, growth</p> <p><u>Living things and their habitats</u></p> <p>We will identify and name a variety of plants and animals in their habitats, including micro-habitats</p> <p>We will describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p> <p>Working Scientifically</p> <ul style="list-style-type: none"> • Asking questions • Observations • Identifying and classifying • Using their observations and ideas to suggest answers to questions <p>Key words</p>	<p><u>Plants</u></p> <p>We will observe and describe how seeds and bulbs grow into mature plants.</p> <p>We will find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</p> <p>Working scientifically</p> <ul style="list-style-type: none"> • Asking questions • Observation • Identification and classifying • Performing simple tests • Using their observations and ideas to suggest answers to questions • Gathering and recording data to answer questions <p>Key words Growth, water, suitable temperature, germination</p> <p><u>Animals</u></p> <p>We will notice that animals, including humans, have offspring which grow into adults</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>we will describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</p> <p>Working Scientifically</p>

	<p>We will identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular use.</p> <p>We will find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p> <p>Working Scientifically</p> <ul style="list-style-type: none"> • Asking questions • Observations • Identifying and classifying • Using their observations and ideas to suggest answers to questions <p>Key words Materials, wood, metal, plastic, glass, bricks, rock, paper cardboard, squashing, bending, twisting, stretching</p>	<p>habitats, micro – habitats, food, food chain, woodland, ocean, rainforest</p>	<ul style="list-style-type: none"> • Asking questions • Observations • Identifying and classifying • Using their observations and ideas to suggest answers to questions <p>Key words Animals, humans, growth offspring, exercise, food, hygiene</p>
<p>End Points</p>	<p>Growth Children will be able to explain the difference between something that is dead, living or never been alive and give examples (with explanations).</p> <p>Habitats Children will know that all living things have a habitat and this provides an animal/plant with its basic needs. Children will be able to give examples of different habitats</p> <p>Materials To understand the suitability of everyday materials for a particular use. Know that solid objects can change their shape.</p>	<p>Animals Children will be able to explain what the basic needs of an animal are.</p> <p>Habitats Children will be able to explain what a micro habitat is and be able to give examples.</p> <p>Growth Children will be able to explain a food chain, say why it is important and give examples</p>	<p>Plants/Growth Children will be able to explain how a plant grows from a seed and what a plant needs to grow and stay healthy</p> <p>Animals/Growth Children will understand that animals have offspring and explain about the basic needs are.</p>