

# Science Map for the OC

## Spring 1

Learning Group	<b>National Curriculum Ref.</b> <b><i>Animals And Humans</i></b>
EYF - KS 1	<ul style="list-style-type: none"><li>- Observe plants and animals and discuss changes, similarities and differences.</li><li>- Understand the terms: Carnivore, Herbivore and Omnivore</li><li>- Identify and Name a variety of animals that are carnivores, herbivores and omnivores</li><li>- Identify shared characteristics of carnivores, herbivores and omnivores.</li><li>- Be aware that animals, including humans, have offspring that grow into adults</li><li>- Understand that all living things will eventually die.</li></ul>
Y3 – Y4	<ul style="list-style-type: none"><li>- Identify that animals and humans need the right types of nutrition</li><li>- Identify that they cannot make their own food and that they get nutrition from what they eat.</li><li>- Understand the terms: predators, prey, producers and consumers</li><li>- Construct and Interpret a variety of food chains, identifying predators, prey, producers and consumers</li><li>- Understand that a food chain is a transference of energy - Recognise that different food chains occur in different habitats.</li></ul>
Y5 – Y6	<ul style="list-style-type: none"><li>- Understand the terms: mammal, amphibian, insect, bird and reptile</li><li>- Identify animals that fall into the categories based on their appearance and make-up.</li><li>- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</li></ul>

## Spring 2

Learning Group	National Curriculum Ref. <i>Plant and Living Things</i>	Specific Context/ Focus for Key Questioning	Activity / Investigation
EYF - KS 1	<ul style="list-style-type: none"> <li>- Can discuss their own environment and how environments vary.</li> <li>- Observe plants and animals and discuss changes, similarities and differences.</li> <li>- Identify (recognise) a variety of common, garden plants</li> <li>- Name a variety of common garden plants.</li> <li>- Identify (recognise) a variety of common, wild plants</li> <li>- Name a variety of common, wild plants.</li> <li>- Understand the terms deciduous and evergreen - Identify (recognise) common, deciduous and evergreen trees</li> <li>- Name common, deciduous and evergreen trees.</li> <li>- Identify the basic structure of common flowering plants and trees (leaves, flowers, petals, stem, root, truck, seed, branches, fruit)</li> <li>- Describe the basic structure of common flowering plants and trees (Roots are at the bottom. Roots feed the plant)</li> <li>- Observe and describe how seeds and bulbs grow into mature plants.</li> <li>- Explore how plants need water, light and a suitable temperature to grow and stay health</li> <li>- Describe how plants need water, light and a suitable temperature to grow and stay healthy.</li> <li>- Understand that environmental change can affect the living things that live there.</li> <li>- Understand that things are either living, dead or have never been alive</li> <li>- Explore and compare the difference between things that are living, dead, and have never been alive.</li> </ul>		
Y3 – Y4	<ul style="list-style-type: none"> <li>- Identify and describe the functions of different parts of flowering plants (roots, stem/trunk, leaves, flowers)</li> <li>- Investigate the way in which water is transported within plants.</li> <li>- Explore the requirements of plants for life and growth (air, light, water, nutrients and room to grow)</li> <li>- Describe how the plants obtains these necessities and the adaptations they go through.</li> <li>- Explore the role of the flower in the life cycle of flowering plants</li> <li>- Know that plants normally grow from seeds or bulbs</li> <li>- Relates seeds with reproduction.</li> <li>- Recognise that living things can be grouped in a number of ways, using their characteristics.</li> <li>- Explore and use classification keys to help group, identify and name a variety of living things in the local and wider environment.</li> </ul>		
Y5 – Y6	<ul style="list-style-type: none"> <li>- Describe the life process of reproduction in some plants and animals</li> <li>- Compare and contrast the similarities and differences in reproduction between a human and a selected animal.</li> <li>- Describe how living things are classified into broad groups based on observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.</li> <li>- Classify animals using characteristics and keys</li> <li>- Give reasons for classifying plants and animals based on specific characteristics.</li> </ul>		

## Summer 1

Learning Group	National Curriculum Ref. <i>Animals And Humans</i>	Specific Context/ Focus for Key Questioning	Activity / Investigation
EYF - KS 1	<ul style="list-style-type: none"> <li>- Identify and Name a variety of common fish and amphibians.</li> <li>- Identify and Name a variety of common reptiles, mammals and birds.</li> <li>- Describe the structure of a variety of animals (fish, reptiles, birds, amphibians, mammals)</li> <li>- Compare the structure of a variety of animals (fish, reptiles, birds, amphibians, mammals)</li> <li>- Explore and describe the basic needs of animals, including humans, for survival (water, warmth, food (light))</li> <li>- Understand what sources there are for these necessities.</li> </ul>		
Y3 – Y4	<ul style="list-style-type: none"> <li>- Identify that some animals and humans have skeletons and muscles for SUPPORT, PROTECTION and MOVEMENT</li> <li>- Describe how skeletons provide SUPPORT, PROTECTION and MOVEMENT.</li> <li>- Compare the similarities and differences between human and animal teeth.</li> </ul>		
Y5 – Y6	<ul style="list-style-type: none"> <li>- Understand that different animals evolve at different rates and live to different ages.</li> <li>- Describe the way in which nutrients and water are transported in animals including humans (absorbed into the blood stream by the vessels).</li> </ul>		

## Summer 2

Learning Group	National Curriculum Ref. <i>Plant and Living Things</i>	Specific Context/ Focus for Key Questioning	Activity / Investigation
EYF - KS 1	<ul style="list-style-type: none"> <li>- Know that the environment and living things are influenced by human activity.</li> <li>- Describe some actions of people that influence the environment they live in (positive and negative).</li> <li>- Understand that different animals live in different places</li> <li>- Describe how different habitats provide the basic needs for different kinds of animals.</li> <li>- Understand and give examples of the fact that animals and their habitats depend on each other</li> <li>- Recognise that living things are adapted to survive.</li> <li>- Identify and name a variety of plants and animals in their habitats, including micro-habitats.</li> <li>- Describe how animals obtain their food from plants and other animals using a simple food chain</li> <li>- Identify and name different food sources.</li> </ul>		
Y3 – Y4	<ul style="list-style-type: none"> <li>- Recognise that environments can change naturally or via human impact and the dangers this can pose</li> <li>- Observe how change affects different living things in different ways.</li> </ul>		
Y5 – Y6	<ul style="list-style-type: none"> <li>- Revision and Investigation</li> </ul>		