

KNOWLEDGE PROGRESSION YEAR GROUP OVERVIEW – Science (Biology)

Science: Biology						
<p>At both key stages the knowledge progression takes full account of the National Curriculum’s Biology strands of:</p> <ul style="list-style-type: none"> ○ Living things and their habitats ○ Animals, including humans ○ Plants ○ Evolution and inheritance 						
Skills are dependent on specific knowledge. A skill is the capacity to perform and in order to perform a deep body of knowledge needs to be acquired and retained.						
Knowledge statements should be what pupils retain for ever. In other words, this knowledge is within their long-term memory and will be retained.						
When considering pupils’ improvement in subject specific vocabulary, pupils could be provided with a knowledge organiser which contains all words used for geography for their age group.						
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
<p>All living things and their habitats</p> <p>EYFS 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.</p>	<ul style="list-style-type: none"> • Classify things by living, dead or never lived • Know how a specific habitat provides for the basic needs of things living there (plants and animals) • Match living things to their habitat • Name some different sources of food for animals • Know about and explain a simple food chain 		<ul style="list-style-type: none"> • Use classification keys to group, identify and name living things • Know how changes to an environment could endanger living things 	<ul style="list-style-type: none"> • Know the life cycle of different living things e.g. mammal, amphibian, insect and bird • Know the differences between different life cycles • Know the process of reproduction in plants • Know the process of reproduction in animals 	<ul style="list-style-type: none"> • Classify living things into broad groups according to observable characteristics and based on similarities and differences • Know how living things have been classified • Give reasons for classifying plants and animals in a specific way 	
<p>Animals, including humans</p> <p>EYFS Explore the natural world around them, making observations and drawing pictures of animals and plants.</p>	<ul style="list-style-type: none"> • Know the name of parts of the human body that can be seen • Know how to classify a range of animals by amphibian, reptile, mammal, fish and birds • Know and classify animals by what they eat (carnivore, herbivore and omnivore) • Know how to sort by living and non-living things 	<ul style="list-style-type: none"> • Know about the importance of a nutritious, balanced diet • Know how nutrients, water and oxygen are transported within animals and humans • Know about the skeletal and muscular system of a human 	<ul style="list-style-type: none"> • Identify and name the parts of the human digestive system • Know the functions of the organs in the human digestive system • Identify and know the different types of human teeth • Know the functions of different human teeth • Use and construct food chains to identify producers, predators and prey 	<ul style="list-style-type: none"> • Create a timeline to indicate stages of growth in humans 	<ul style="list-style-type: none"> • Identify and name the main parts of the human circulatory system • Know the function of the heart, blood vessels and blood • Know the impact of diet, exercise, drugs and lifestyle on health • Know the ways in which nutrients and water are transported in animals, including humans 	

<p>Plants</p> <p>EYFS</p> <p>Explore the natural world around them, making observations and drawing pictures of animals and plants.</p>	<ul style="list-style-type: none"> • Know and name a variety of common wild and garden plants • Know and name the petals, stem, leaves and root of a plant • Know and name the roots, trunk, branches and leaves of a tree 	<ul style="list-style-type: none"> • Know and explain how seeds and bulbs grow into plants • Know what plants need in order to grow and stay healthy (water, light & suitable temperature) 	<ul style="list-style-type: none"> • Know the function of different parts of flowering plants and trees • Know how water is transported within plants • Know the plant life cycle, especially the importance of flowers 			
<p>Evolution and Inheritance</p>						<ul style="list-style-type: none"> • Know how the Earth and living things have changed over time • Know how fossils can be used to find out about the past • Know about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents) • Know how animals and plants are adapted to suit their environment • Link adaptation over time to evolution • Know about evolution and can explain what it is

KEY:

living things

habitats and environment

food, nutrition and food chains

life cycles and reproduction

plants

animals and humans

exercise, a balanced diet

evolution and changes over time (link to Chemistry - Rocks)

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