



Year Two Science Progression Steps

Year 2	Developing	Expected Standard	Exceeding	Scientific Language
<p><u>Animals, including humans (Biology)</u></p> <p>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>Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.</p>	<ul style="list-style-type: none"> • Pupil recognises that humans are animals and all animals have young/offspring/babies which in time become adults • Pupil can explain several of the basic needs that all animals have for survival • Pupil understands that poor diet can affect humans • Pupil is beginning to recognise why exercise is important to humans <ul style="list-style-type: none"> • Pupil can give simple reasons for humans having good hygiene 	<ul style="list-style-type: none"> • Pupil can describe the life cycle of common animals, including humans, and sequence them correctly over time • Pupil describes the basic needs of all animals, including humans, for survival and begins to recognise the reasons for these needs • Pupils recognise that humans need a balanced diet and can explain what constitutes a balanced diet • Pupil understands that exercise is important to humans and can explain in its impact upon the body • Pupil understands that germs and other diseases/health issues can be spread by poor hygiene and cleanliness and suggest some preventative measures • 	<ul style="list-style-type: none"> • Pupil compares the human lifecycle to those of other animals identifying any similarities and differences • Pupil is beginning to compare the basic needs of different animals and the consequences of these needs not being met or being limited – i.e. death, starvation, adaptation of body • Pupil can describe the different food groups in a balanced diet and explain the effect on the body of poor diet/imbalanced diet • Pupil can describe how different parts of the body respond to exercise and how the body is affected due to lack of exercise • Pupil can explain how to stop diseases caused by germs and parasites spreading, thereby reducing stomach upsets, spread of head lice, some skin conditions etc • 	<p>human; animals; life cycle; grow; growth; young; offspring; reproduce; parent; baby; toddler; child; teenager; adult; mature; elderly; water; air; oxygen; food; diet; balanced diet; variety; germs; bacteria; diseases; parasites; bugs; infection; hygiene; cleanliness; medicines; safety; habitat; survive; food plate/pyramid; proteins; fats; carbohydrates; fibre; minerals; vitamins; sugary foods; dairy foods; energy; calorie; taste; sweet; sour; salty; move; exercise; fitness; heart; heart rate; pulse; blood; healthy; unhealthy;</p>
<p><u>Living things and their habitats (Biology)</u></p> <p>Explore and compare the differences between things that are living, dead and things that have never been alive.</p> <p>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</p>	<ul style="list-style-type: none"> • Pupil can identify most things as living, dead and never been alive • Pupil can name some basic habitats and the names of some animals or plants found there • Pupil understands that a habitat is where an animal or plant lives when basic needs are met • Pupil knows that plants can make their own food and animals cannot • Pupils recognise that animals need to eat plants and/or other animals to survive and a food chain shows this relationship 	<ul style="list-style-type: none"> • Pupil uses key features to identify living, dead and never been alive – e.g. living things grow, reproduce, use their senses, feed, move • Pupil can explain how a habitat provides the basic needs for a range of animals and plants • Pupil can name a wide range of habitats and some micro- habitats (local and globally) together with the names of animals/plants found here • Pupil can explain how a habitat provides the basic needs for a range of animals and plants 	<ul style="list-style-type: none"> • Pupil can use MRS GREN acronym to classify things which are living, dead and never been alive • Pupil explains each aspect of MRS GREN • Pupil can explain the names of a wide range of both habitats and micro-habitats and how they meet the basic needs of animals/plants found there • Pupil can describe the impact upon animals/plants of changing a basic need in a habitat/micro-habitat and suggest how this aspect could be restored • Pupil can explain how a range of animals/plants have adapted to live in 	<p>Key vocabulary: animal; plant; Habitat; micro-habitat; environment; classify; sort; living things; dead; alive; food chain; healthy; predator; prey; producer; consumer; decomposer; nocturnal; group; adaption; diversity; survive; survival; organism; group; herbivore; carnivore; omnivore;</p> <p>In addition give names of some key local and global habitats that you will explore and animals/plants which live there e.g. woodland; pond; seashore;</p>

<p>how they depend on each other.</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>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>		<ul style="list-style-type: none"> • Pupil can name a wide range of habitats and some micro- habitats (local and globally) together with the names of animals/plants found here • Pupil describes how animals and plants, in a habitat, depend on each other for survival and what may happen if a basic need is no longer available in the habitat • Pupil recognises that animals/plants may adapt to live in a habitat / micro-habitat • Pupil knows that plants make their own food (producers) and animals get their food by eating plants and/or other animals (consumers). Pupil knows that plants make their own food (producers) and animals get their food by eating plants and/or other animals (consumers). • Pupil can identify and/or create a range of food chains to show the relationships between producers and consumers in a habitat, recognising predators and prey 	<p>different habitats / micro- habitats e.g. desert, polar</p> <ul style="list-style-type: none"> • Pupils can describe food chains using appropriate vocabulary to identify the sun as the source of energy in a food chain, then the relationships between producers, consumers (herbivores, carnivores or omnivores) and decomposers 	<p>ocean; rainforest; polar; under a log/rock/bush; on a stony path; canopy; woodlouse; hermit crab; sea weed; bracken; moss;</p>
<p>Year 2</p>	<ul style="list-style-type: none"> • Developing 	<p>Expected Standard</p>	<ul style="list-style-type: none"> • Exceeding 	<p>Scientific Language</p>
<p>Uses of everyday materials (Chemistry)</p> <p>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p>	<ul style="list-style-type: none"> • Pupil understands that some materials can be used for a variety of purposes e.g. plastic, wood, metal • Pupil can group objects made from similar materials and begin to explain the suitability of the material • Pupil recognises that the shape of some solid objects can be changed and offers simple explanations to explain why this occurs • Pupil recognises that inventors/scientists have and still are making new materials to meet needs in the world 	<ul style="list-style-type: none"> • Pupil can explain the properties of materials which make them suitable for a purpose • Pupil can demonstrate how a wide range of materials are suitable for the same purpose • Pupil can use their knowledge of materials to suggest different ways they could be grouped e.g. hardness; flexibility • Pupil has investigated the properties of materials extensively and understands that the shapes of some solid objects can be changed. • Pupil can use appropriate language to describe the change of shape of some solid objects when pressure is applied in different ways • Pupil has investigated the properties of materials extensively and understands that the shapes of some solid objects 	<ul style="list-style-type: none"> • Pupil can use their knowledge of materials to suggest which is most suitable for a purpose giving clear, reasoned argument for their choice of one and limitations of other materials • Pupil can describe why it is helpful to scientists to be able to classify and group materials according to their properties • Pupil can compare and contrast, using correct vocabulary, the properties of a wide range of materials allowing the shape of objects made from them to change • Pupils can discuss the work of several scientists who have created new materials and explain their usefulness today 	<p>materials; natural; man-made; manufactured; object; group; properties; change; bake; bend; twist; stretch; squash; heat; cool; freeze; melt; boil; metal; plastic; wood; paper; glass; clay; rock; fabric; sand; hard; soft; rough; smooth; shiny; dull; bendy; waterproof; absorbent; non-absorbent; strong; weak; magnetic; non-magnetic; transparent; opaque; translucent;</p>

		<p>can be changed.</p> <ul style="list-style-type: none"> • Pupil can use appropriate language to describe the change of shape of some solid objects when pressure is applied in different ways <p>Pupils can name a scientist who has developed useful new materials explaining what property this material has which makes it useful</p>		
<p>Plants (Biology) Observe and describe how seeds and bulbs grow into mature plants.</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p>	<ul style="list-style-type: none"> • Pupil can identify that seeds and bulbs can grow into plants when conditions are suitable • Pupil can identify one condition a plant needs to grow and be healthy • Pupil recognises that plants can grow at different rates • Pupil understands a seed/bulb will not grow if growing conditions are not correct <ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Pupil can describe with appropriate vocabulary the different stages of plant growth from a seed/bulb to mature plant • Pupil can identify all conditions needed for a plant to grow and be healthy • Pupil can measure the rate of growth of a range of plants giving some reasons for the differences in rate of growth they note • Pupil identifies the suitability of some plants for different growing conditions e.g. low light, drought/arid habitats; no soil. 	<ul style="list-style-type: none"> • Pupil can recognise and describe that different types of plants may have different growth patterns from a seed/bulb to mature plant • Pupil may be able to suggest making changes to the conditions experienced by a seed/bulb in order to accelerate growth or correct abnormal growth patterns • Pupil can measure, compare and contrast the growth of a range of common, wild and commercial plants • Pupil recognises and begins to explain what happens to a seed/bulb or plant if it does not have suitable conditions for growth or the conditions change during growth • Pupil explains that some plants may be more suited to changeable environmental conditions than others. <ul style="list-style-type: none"> • 	<p>seed; bulb; seedling; mature plant; water; light; temperature; grow(th); healthy; unhealthy; suitable conditions; germinate; live; living; non-living; accelerate; stunted; weak; spindly; wild; commercial; soil; energy; food; producer;</p>