BIOLOGY
Progression of Knowledge, Skills and Vocabulary

EYFS	KS1		LKS2		UKS2	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Development Matters (Reception) ***Understanding the World*** • *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 can understand the effect of changing seasons on the natural world around me.* **Early Learning Goals:** • I can explore the natural world around me, making observations and drawing pictures of animals and plants. • I know some similarities and differences between the natural world around me and contrasting environments, drawing on my experiences and what has been read in class. • I can understand some important processes and changes in the natural world around me, including the seasons and changing states of matter.	**Plants** **NC** *Pupils should be taught to:* ♣ *identify and name a variety of common wild and garden plants, including deciduous and evergreen trees* ♣ *identify and describe the basic structure of a variety of common flowering plants, including trees.* • I can identify and name a variety of common wild and garden plants, including deciduous and evergreen trees • I can describe and name the parts of a flowering plant including trees **Vocab** **Names of: wild plants, garden pants, flowering plants, trees, leaf, flower, blossom, petal, fruit, berry, root, bulb, seed, trunk, branch, stem, bark, stalk, vegetable**	**Plants** **NC** *Pupils should be taught to:* ♣ *observe and describe how seeds and bulbs grow into mature plants* ♣ *find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.* • I can describe the conditions necessary inc water, light and suitable temperature for plant growth • I can describe how seeds and bulbs grow into mature plants • I can identify and draw basic parts of a plant inc. roots, stem, leaf and flower **Vocab** **seeds, bulbs, water, light, growth, healthy, shoot, seedling,**	**Plants** **NC** *Pupils should be taught to:* ♣ *identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers* ♣ *explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant* ♣ *investigate the way in which water is transported within plants* ♣ *explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.* • I can describe the function of the parts of a flowering plant (roots, stem, leaf, flowers - stamen, carpel) • I can explore the requirements for plant growth (air, light, water, nutrients from soil, room) and how they are different for different plants • I can explore how water is transported within plants • I can explore different stages of the lifecycle of flowering plants including pollination, seed formation and seed dispersal.			

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			Vocab **leaf, flower, blossom, petal, fruit, root, bulb, seed trunk, branch, stem, water, light, air, nutrients, soil, fertiliser, grow, healthy, transported, life cycle, pollination, seed formation, seed dispersal**			
	Animals, including humans **NC** Pupils should be taught to: ♣ identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals ♣ identify and name a variety of common animals that are carnivores, herbivores and omnivores ♣ describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) ♣ 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 can identify and name a variety of common animals inc. fish, amphibians, reptiles, birds and mammals • I can identify and name common animals that are carnivores, herbivores and omnivores • I can describe and compare the structure of a variety of animals (see above) inc. pets • I can identify, name, draw and label basic parts of the human body • I can say which part of the body is associated with each sense.	**Animals, including humans** **NC** Pupils should be taught to: ♣ notice that animals, including humans, have offspring which grow into adults ♣ find out about and describe the basic needs of animals, including humans, for survival (water, food and air) ♣ describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. • I notice that animals inc. humans have offspring which grow into adults • I can describe the basic needs of animals, including humans, for survival. I can describe the importance for humans of exercise, healthy eating and good hygiene **Vocab** **offspring, life cycles, grow, change, adults, basic needs, water, food, air survival, exercise, food types (fruit and veg, bread, rice, pasta, milk, dairy, foods high in fat and sugar, meat, fish, eggs, beans), hygiene**	**Animals, including humans** **NC** Pupils should be taught to: ♣ identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat ♣ identify that humans and some other animals have skeletons and muscles for support, protection and movement. • I can explain that some animals have skeletons and muscles for support, protection and movement • I can explain that animals cannot make food and need to get their nutrition from what they eat giving examples of different food groups• I can explain how changing variables within a food chain might affect the habitat **Vocab** **Nutrition, food types, carbohydrates, protein, vitamins and minerals, fat, sugar, fruits and veg, dietary fibre, water, balanced diet, skeleton, muscles, support, protection, movement, names of bones, vertebrate, invertebrate**	**Animals, including humans** **NC** Pupils should be taught to: ♣ describe the simple functions of the basic parts of the digestive system in humans ♣ identify the different types of teeth in humans and their simple functions ♣ construct and interpret a variety of food chains, identifying producers, predators and prey. • I can describe the simple function and basic parts of the human digestive system • I can identify the different types of teeth in humans and their basic functions • I can create and interpret simple food chains and name the producer, predator and prey **Vocab** **Digestive system, nutrition, mouth, teeth, canine, incisor, molar, pre-molar, saliva, tongue, rip, tear, chew, grind, cut, oesophagus (gullet), stomach, small intestine, large intestine, rectum, anus, carnivore, herbivore, omnivore, producer, consumer, predator, prey, food chain**	**Animals, including humans** **NC** Pupils should be taught to: ♣ describe the changes as humans develop to old age. • I can describe the changes which happen as a human develops to old age (link to RSE/PSHE)	**Animals, including humans** **NC** Pupils should be taught to: ♣ identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood ♣ recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function ♣ describe the ways in which nutrients and water are transported within animals, including humans. • I can identify and name the main parts of the circulatory system and describe the functions of the heart, blood vessels and blood • I recognise the impact of diet, exercise, drugs and lifestyle on the way the body functions (link to RSE / PSHE) • I can describe the way nutrients and water are transported within animals including humans **Vocab** **Circulatory system, heart, blood, blood vessels, pumps, oxygen, carbon dioxide, lungs, nutrients, water, diet, exercise, drugs, lifestyle, evolution, suited/suitable, adapted, adaptation, offspring, reproduction, variation, inherit, inheritance, fossils**

(Aut/Spr/Sum)

	Vocab **Body, head, neck, arms, elbows, legs, knees, face, ears, eyes, eyebrows, eyelashes, nose, hair, mouth, teeth, tongue, feet, toes, fingers, nails, ankle, calf, thigh, hips, waist, trunk, chest, shoulders, back, hands, wrist, tail, wing, claw, fin, scales, feathers, fur, beak, senses, hearing, seeing, touching, smelling, tasting, smooth, bright, dim, loud, quiet, high, low**					
		Living things and their habitats **NC** Pupils should be taught to: ♣ explore and compare the differences between things that are living, dead, and things that have never been alive ♣ 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 ♣ identify and name a variety of plants and animals in their habitats, including microhabitats ♣ 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 can explore and compare the differences between things that are living, dead and things which have never been alive • I can identify that most living things live in habitats to which they are suited and describe how habitats provide		**Living things and their habitats** **NC** Pupils should be taught to: ♣ recognise that living things can be grouped in a variety of ways ♣ explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment ♣ recognise that environments can change and that this can sometimes pose dangers to living things. • I can group living things in a variety of ways • I recognise that environments can change and that this can pose dangers to living things • I use classification keys to group, identify and name a variety of living things in their environment • I can create and interpret complex food chains and name the producers, predators and prey **Vocab** **Classification keys, environment, fish, amphibians,**	**Living things and their habitats** **NC** Pupils should be taught to: ♣ describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird ♣ describe the life process of reproduction in some plants and animals. • I can describe the differences in the life cycles of a mammal, a bird, an amphibian and an insect • I can describe the process of reproduction in some plants and animals • I can explain the processes of fertilisation, pollination and seed dispersal **Vocab** **Life cycle, reproduction, sexual, asexual, germination, pollination, seed formation, seed dispersal, pollen, stamen, stigma, plantlets, runners, mammal, amphibian, insect, bird, fish, reptile, eggs, live young**	**Living things and their habitats** **NC** Pupils should be taught to: ♣ describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals ♣ give reasons for classifying plants and animals based on specific characteristics. • I can describe how living things are classified into groups based on similarities and differences • I can give reasons why plants and animals are classified based on specific characteristics •I know different types of microorganisms and their uses **Vocab** **Organism, micro-organism, fungus, mushrooms, classification keys, environment, fish, amphibians, reptiles, birds, mammals, vertebrates, invertebrates,**

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		for the basic needs of different animals and plants and how they depend on each other • I can identify and name a variety of plants and animals, including microhabitats • I can describe how animals obtain their food from plants and other animals and create a simple food chain • I can name and identify different sources of food **Vocab** **Living, dead, never been alive, names of local habitats, pond, woodland, meadow, name micro habitats, under log, stony path, under bushes, suited, basic needs, depend, food, food chain, shelter**		**reptiles, birds, mammals, vertebrates, invertebrates, names of them, human impact, positive, negative (impact).**		**name some of these, arachnid, mollusc, insect, crustacean**
						Evolution and inheritance **NC** Pupils should be taught to: ♣ recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago ♣ recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents ♣ identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. • I can recognise that living things have changed over time and understand that fossils provide information about living things that inhabited the Earth millions of years ago

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						• I can identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution • I know that living things produce offspring and that offspring normally vary and are not identical to their parents

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