Ashtree Primary School and Nursery Unit Progression Plan for Science

Living Things and Their Habitats

Year Group	Unit	Key Knowledge	Key Vocabulary
Nursery	The World Around Us	• Plant seeds and care for growing plants. • Understand the key features of the life cycle of a plant and an animal. • Begin to understand the need to respect and care for the natural environment and all living things.	natural, plant, animal, leaves, seeds, conkers, acorns, twigs, bark, shells, feathers, pebbles, stones, same, different, pattern
Reception	The World Around Us	• Explore the natural world around them. • Describe what they see, hear and feel while they are outside. • Recognise some environments that are different to the one in which they live. • Understand the effect of changing seasons on the natural world around them. **ELG** • Explore the natural world around them, making observations and drawing pictures of animals and plants. • 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. • Understand some important processes and changes in the natural world around them	plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment e.g. beach, forest
Year 1	The Seasons	• identify what to observe • use descriptive words, photos and pictures to record changes • collect evidence of changes (e.g. leaves, seeds, flowers) • name the four seasons • recall simple changes associated with each season • observe and name types of weather (e.g. rain, sun, wind, clouds) • identify what to measure about the weather • use prepared tables and charts to record data	Seasons: Autumn, Spring, Summer, Winter, deciduous, evergreen, shoot, fruit, earth, seeds, leaves, flowers, weather types: rain, hail, snow, ice, frost, sun, showers, wind, reproduce, babies/adults, life cycles, birds, insects, cold, warm, hot, sunrise, sunset
Year 2	Local Animals and Habitats	• with help, use keys to identify some animals and plants • recognise that different plants live in the local environment • identify some local habitats • describe the simple features of habitats • recognise a microhabitat as a small habitat (e.g. leaf litter, woodlice under stones) • describe some microhabitats • recognise similarities and differences between plants and animals • explain differences between living and non-living things in terms of characteristics such as movement and growth • use their observations to point out differences between animals, plants and non-living things • recognise that plants provide food for humans and other animals within an environment • construct a simple food chain (e.g. grass, cow, human) • name a few of the organisms that live in a particular habitat • suggest reasons why different plants and animals are found in the different environments	dead, alive, living, non-living, habitats, keys, breathe, grow, eat, have babies, move, sense, go to the toilet, habitat, microhabitat, food chain
Year 3		Not covered in this year group	
Year 4	Animals and Habitats around the World Classifying Animals	• explore ways of grouping living things including animals and plants (flowering and non-flowering) • recognise that animals can be grouped into vertebrates and invertebrates • describe some of the characteristics of the vertebrate (fish, mammals, amphibians, reptiles and birds) groups (e.g. warm-blooded, have fur, lay eggs) • group animals into vertebrate (fish, mammals, amphibians, reptiles and birds) and invertebrates groups (snails, slugs, spiders, worms and insects) • identify that some animals feed on other animals and some on plants • represent feeding relationships with simple food chains • recognise that a food chain must always start with a green plant (a producer) • represent feeding relationships within a habitat with food chains beginning with a green plant which 'produces' food for the other organisms • recognise that green plants are the ultimate source of food for all animals • use and understand the terms: producer, predator and prey • know the function of some of the more complex features which aid survival in specific habitats (e.g. gills, blubber, camouflage) • describe why different animals and plants live in different habitats • describe how humans can cause changes to environments • explain that different organisms are found in different habitats because of differences in environmental factors	river, ocean, desert, arctic, rainforest, mountain, farmland, wood, dry, wet, vegetation, shelter, vertebrate, invertebrate, classify, characteristic, flowering plant, non-flowering plant (fern, moss)
Year 5	Life Cycles and Environments	• sequence the life cycles of a variety of plants and animals • recognise the similarities in the life cycles of plants, animals and humans • name the parts of a flower • describe the functions of some parts of a flower • describe the main functions of parts of a plant involved in reproduction • describe the processes of sexual and asexual reproduction in plants • name the parts of the human reproductive system • describe the simple functions of parts of the human reproductive system • compare methods of seed dispersal • know that most animals reproduce by sexual reproduction	Live young, hatch, tadpole, caterpillar, butterfly, ladybird, pupae, larvae, chrysalis, reproduction, asexual, sexual, life cycle, pollination, seed dispersal, pollen, stamen, stigma
Year 6	Classifying Living Things Micro-organisms	• recognise that there is a wide variety of living things • understand why classification is important • identify vertebrates and invertebrates • name and describe the five vertebrate groups • *devise own keys to classify organisms and objects* • *describe early ideas about classification (e.g. Aristotle)* • understand there are living things that are too small to be seen and these can affect our lives • recognise that there are many micro-organisms, some which can cause illness or decay • recognise that there are useful micro-organisms which can be used in food production • describe how micro-organisms feed, grow and reproduce like other organisms • describe evidence, from investigations, that yeast is living • explain how micro-organisms can move from one food source to another or from one animal to another	Micro-organism, microbe, fungus, bacteria, virus, classified, classification key, yeast, characteristic, microscope
	Evolution and Inheritance	• recognise variation in different species (e.g. dogs, horses) – Variety, variation, species • recognise that offspring have some of the features of their parents • recognise that animals have to compete for food • describe how animals avoid predators (e.g. speed, camouflage) • describe how animals and plants are adapted to their environments – evolve, fossil record, gills, blubber, moulting, long neck, hooves, eyelashes, tails, generation • explain how being well adapted to an environment means an organism is more likely to survive – evolve, fossil record, gills, blubber, moulting, long neck, hooves, eyelashes, tails, generation	Variety, variation, offspring, species, competition, adapt, adaptation, reproduce, survive, evolve, fossil record, gills, blubber, moulting, long neck, hooves, eyelashes, tails, generation