St Mark's CE Primary School
Science Curriculum Map: Living Things and their Habitats

Year	National Curriculum	Sticky Knowledge	Vocab
R	***Year A Autumn*** • Introducing hibernation • Planting seeds ***Year A Summer*** • What do plants need to grow? • Caterpillar lifecycles • Minibeasts and their habitats • Creating a wormery • Life under the sea	***Year B Autumn*** • Hibernation ***Year B Summer*** • Looking at which animals lay eggs and have babies • Animal habitats • Hatching chicks/lifecycles	
2	***How do habitats meet the needs of living things?*** *(Autumn 1)*		
	• 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.	• Living things are alive. Dead things are those that were once living but are no longer. Some things have never been alive. • A habitat is a place where a living thing lives. Local habitats include parks, woodland and gardens. Habitats beyond the locality include beaches, rainforests, deserts, oceans and mountains. • All living things live in a habitat to which they are suited, and it must provide everything they need to survive.	Living Non-living Life Process Movement Alive Dead Never alive Habitat Local Suitable Depend Relationships Links
2	***How do animals and plants rely on each other for food?*** *(Summer 2)*		
	• Identify and name a variety of plants and animals in their habitats, including micro-habitats • 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	• A habitat is a place where a living thing lives. Local habitats include parks, woodland and gardens. Habitats beyond the locality include beaches, rainforests, deserts, oceans and mountains. • All living things live in a habitat to which they are suited, and it must provide everything they need to survive. A microhabitat is a very small habitat. • Food chains show how living things depend on one another for food. All food chains start with a plant, followed by animals that eat plants or other animals.	Microhabitat Habitat Minibeast Suited Compare Threat Protect Food chain Plants Role Similar Different
4	***Which living things thrive in our local area and how can we group them?*** *(Autumn 1)*		
	• 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	• Living things can be grouped in different ways (e.g. by what they eat, how they move, or where they live). • A classification key is a tool that helps us identify and group living things. We can use a yes or no question to help sort and identify animals or plants. • Environments can change naturally (like flooding, drought or fire) or because of human actions (like pollution or building). Changes to habitats can be dangerous for living things, and may cause them to move, adapt, or even die.	Group Sort Features Habitat Local Classification Key Identify Climate Change Pollution Deforestation Endangered Conservation Protect

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5	***Do all living things start off as an egg?*** *(Autumn 2)*		
	• 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.	• A life cycle is the series of changes in the life of a living thing and includes these basic stages: birth, growth, reproduction and death. • Mammals' life cycles include the stages: embryo, juvenile, adolescent and adult. Amphibians' life cycles include the stages: egg, larva (tadpole), adolescent and adult. Some insects' (butterflies, beetles and bees) life cycles include the stages: egg, larva, pupa and adult. Birds' life cycles include the stages: egg, baby, adolescent and adult. • Reproduction is the process of producing offspring and is essential for the continued survival of a species. • Flowers are important in the life cycle of flowering plants. The processes of a plant's life cycle include germination, flower production, pollination, seed formation and seed dispersal. • Parts of a flower include the stamen, filament, anther, pollen, carpel, stigma, style, ovary, ovule and sepal. Pollination is when the male part of a plant (pollen) is carried, by wind, insects or other animals, to the female part of the plant (carpel). Pollen travels to the ovary, where it fertilises the ovules (eggs). Seeds are then produced, which disperse far away from the parent plant and grow new plants. • Not all plants produce seeds in order to reproduce.	Mammal Amphibian Insect Bird Feature Characteristic Life Cycle Reproduction Seeds Carpel Stamen Stigma Anther Ovary Petal Pollen Fertilise Cutting
6	***How do scientists use classification to group living things?*** *(Autumn 2)*		
	• Describe how living things are classified into broad groups according to common observable characteristics based on similarities and differences, including microorganisms, plants and animals • Give reasons for classifying plants and animals based on specific characteristics	• Scientists classify living organisms into broad groups according to their common observable characteristics and based on similarities and differences. • Animals can be divided into six main groups: mammals, reptiles, amphibians, birds, fish and invertebrates. These groups can be further subdivided. Vertebrates are an example of a classification group. • Carl Linnaeus was a notable scientist in this area who created a way of naming newly discovered living things based on their species and genus. • Classification keys are scientific tools that aid the identification of living things based on their physical characteristics.	Group Characteristics Species Vertebrates Invertebrates Species Genus Latin Key Survey Sample Microorganism Bacteria Fungi Virus Harmful Helpful Antibiotics