

Staplegrove Church School
Knowledge and Skills Progression in Science
Living things and their habitats

Year group	Knowledge	Skills	Unit
1			
2	<p>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.</p> <p>A habitat is a place where a living thing lives. A microhabitat is a very small habitat.</p> <p>Food chains show how living things depend on one another for food. All food chains start with a plant, followed by animals that either eat the plant or other animals.</p> <p>Living things are those that are alive. Dead things are those that were once living but are no longer. Some things have never been alive.</p>	<p>Describe a range of local habitats and habitats beyond their locality (beaches, rainforests, deserts, oceans and mountains) and what all habitats provide for the things that live there.</p> <p>Identify and name a variety of plants and animals in a range of habitats and microhabitats.</p> <p>Interpret and construct simple food chains to describe how living things depend on each other as a source of food.</p> <p>Compare and group things that are living, dead or have never been alive.</p>	<p>Animal Survival Habitats Plan Survival</p> <p>Animal Survival Habitats</p> <p>Habitats</p>
3			
4	<p>Scientists classify living things according to shared characteristics. Animals can be divided into six main groups: mammals, reptiles, amphibians, birds, fish and invertebrates. These groups can be further subdivided. Classification keys are scientific tools that aid the identification of living things.</p> <p>Habitats change over time, either due to natural or human influences. Natural influences include extreme or unseasonable weather. Human</p>	<p>Compare, sort and group living things from a range of environments, in a variety of ways, based on observable features and behaviour.</p> <p>Explain how unfamiliar habitats, such as a mountain or ocean, can change over time and what influences these changes.</p>	<p>Grouping and ...</p> <p>Misty Mountains</p>

	<p>influences include habitat destruction or pollution. These changes can pose a risk to animals and plants that live in the habitat. (IN GREY ON CORNERSTONES)</p> <p>Humans can affect habitats in negative ways, such as littering, pollution and land development, or positive ways, such as garden ponds, bird boxes and wildflower areas.</p> <p>Scientists classify living things according to shared characteristics. Animals can be divided into six main groups: mammals, reptiles, amphibians, birds, fish and invertebrates. These groups can be further subdivided. Classification keys are scientific tools that aid the identification of living things.</p>	<p>Describe how environments can change due to human and natural influences and the impact this can have on living things.</p> <p>Compare, sort and group living things from a range of environments, in a variety of ways, based on observable features and behaviour.</p>	<p>Misty Mountains</p> <p>Grouping and ...</p>
<p>5</p>	<p>Humans reproduce sexually, which involves two parents (one female and one male) and produces offspring that are different from the parents.</p> <p>Flowering plants reproduce sexually. The flower is essential for sexual reproduction. Other plants reproduce asexually. Bulbs, corms and rhizomes are some parts used in asexual reproduction in plants.</p> <p>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). The 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.</p> <p>Reproduction is the process of producing offspring and is essential for the continued survival of a species. There are two types of reproduction: sexual and asexual. Sexual reproduction involves two</p>	<p>Describe the process of human reproduction.</p> <p>Group and sort plants by how they reproduce.</p> <p>Label and draw the parts of a flower involved in sexual reproduction in plants (stamen, filament, anther, pollen, carpel, stigma, style, ovary, ovule and sepal).</p> <p>Describe the life process of reproduction in some plants and animals.</p>	<p>Human Reproduction</p> <p>Sow, Grow and ...</p> <p>Sow, Grow and ...</p> <p>Human Reproduction Sow, Grown and ...</p>

	<p>parents (one female and one male) and produces offspring that are different from the parents. Asexual reproduction involves one parent and produces offspring that is identical to the parent.</p> <p>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.</p>	<p>Compare the life cycles of animals, including a mammal, an amphibian, an insect and a bird.</p>	<p>Human Reproduction Sow, Grown and ...</p>
<p>6</p>	<p>Classification keys help us identify living things based on their physical characteristics.</p> <p>Scientists classify living organisms into broad groups according to their characteristics. Vertebrates are an example of a classification group. There are a number of ranks, or levels, within the biological classification system. The first rank is called a kingdom, the second a phylum, then class, order, family, genus and species.</p> <p>Living things are classified into groups, according to common observable characteristics and based on similarities and differences.</p>	<p>Use and construct classification systems to identify animals and plants from a range of habitats.</p> <p>Classify living things, including microorganisms, animals and plants, into groups according to common observable characteristics and based on similarities and differences.</p> <p>Research unfamiliar animals and plants from a range of habitats, deciding upon and explaining where they belong in the classification system.</p>	<p>Frozen Kingdom</p>