



Porters Grange Primary School

**Science Learning Sequence**

Living things and their habitats (Biology)	
Nursery/ Reception	<p>Children know about similarities and differences in relation to places, objects, materials and living things.</p> <p>They make observations of animals and plants and explain why some things occur, and talk about changes.</p>
Year 1	<ul style="list-style-type: none"> <li>• <i>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (Y1 - Plants)</i></li> <li>• <i>Identify and describe the basic structure of a variety of common flowering plants, including trees. (Y1 - Plants)</i></li> <li>• <i>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (Y1 - Animals including humans)</i></li> <li>• <i>Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 - Animals including humans)</i></li> <li>• <i>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). (Y1 – Animals, including humans)</i></li> <li>• <i>Observe changes across the four seasons. (Y1 - Seasonal change)</i></li> </ul>
Year 2	<ul style="list-style-type: none"> <li>• Explore and compare the differences between things that are living, dead, and things that have never been alive</li> <li>• 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</li> <li>• Identify and name a variety of plants and animals in their habitats, including micro-habitats</li> <li>• 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.</li> <li>• <b>Vocabulary: Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed</b> <ul style="list-style-type: none"> <li>• Names of local habitats e.g. pond, woodland etc.</li> <li>• Names of micro-habitats e.g. under logs, in bushes etc.</li> </ul> </li> <li>• <i>Notice that animals, including humans, have offspring which grow into adults. (Y2 - Animals including humans)</i></li> </ul>
Year 3	<ul style="list-style-type: none"> <li>• <i>Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Y3 - Plants)</i></li> </ul>
Year 4	<ul style="list-style-type: none"> <li>• Recognise that living things can be grouped in a variety of ways</li> </ul>

	<ul style="list-style-type: none"> <li>• Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</li> <li>• Recognise that environments can change and that this can sometimes pose dangers to living things.</li> <li>• <b>Vocabulary:</b> Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate</li> <li>• <i>Construct and interpret a variety of food chains, identifying producers, predators and prey. (Y4 - Animals, including humans)</i></li> </ul>
Year 5	<ul style="list-style-type: none"> <li>• Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</li> <li>• Describe the life process of reproduction in some plants and animals.</li> <li>• <b>Vocabulary:</b> Life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings</li> </ul>
Year 6	<ul style="list-style-type: none"> <li>• Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals</li> <li>• Give reasons for classifying plants and animals based on specific characteristics.</li> <li>• <b>Vocabulary:</b> Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering, non-flowering</li> <li>• <i>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. (Y6 - Evolution and inheritance)</i></li> <li>• <i>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. (Y6 - Evolution and inheritance)</i></li> </ul>
Key Stage 3	<ul style="list-style-type: none"> <li>• Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta.</li> <li>• Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms.</li> <li>• Differences between species.</li> </ul>