**Science- progression**

**Living things and their habitats**

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| Reception: * Comments and asks questions about aspects of their familiar world such as the natural world.
* Can talk about some of the things they have observed such as animals, plants, natural and found objects.
* Talks about why things happen and how things work.
* Developing an understanding of growth, decay and changes over time.
* Shows care and concern for living things and the environment.
* Looks closely at similarities, differences, patterns and change.
* **ELG: Children know about the similarities and differences in relation to places, objects, materials and living things. They talk about the features of the own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.**
* ***Practical exploration and discussion of living things and their habitats through; learning journeys, mini beast hunts in outdoor learning environment, things noticed, seen, observed.***
* ***Discussions based on children’s own experiences and interests in and out of school e.g.; fiction and non-fiction texts, home record books, trips to local and wider environments including farms, zoos, aquariums, garden centres, pet stores.***
* ***Learning and discussion linked topics/activities e.g. under the sea, minibeasts, arctic animals. Pupils discuss where they live and where different animals might live and why they might like or need to live there.***
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| Year 1: N/ARecap –  |
| Year 2:* **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**

**Working Scientifically:*** asking simple questions and recognising that they can be answered in different ways
* identifying and classifying
* using their observations and ideas to suggest answers to questions

**Link to Teacher Assessment Framework:*** Identify whether things are alive, dead or have never lived
* Name different plants and animals and describe how they are suited to different habitats
* Group animals according to what they eat, describe how animals get their food from other animals and/or from plants, and use simple food chains to describe these relationships
* Recap – (From Reception) Where different animals live, animal names, what animals need.

**Vocabulary:** Living, Dead, Habitat, Energy, Food chain, Predator, Prey, Woodland, Pond, Desert**Working scientifically vocabulary:** classify, sort, group, observe, describe, question, answer, compare, contrast |
| Year 3: N/ARecap -  |
| Year4:* **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

**Working Scientifically:*** asking relevant questions and using different types of scientific enquiries to answer them
* gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
* recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables reporting on findings from enquiries
* reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
* identifying differences, similarities or changes related to simple scientific ideas and processes
* using straightforward scientific evidence to answer questions or to support their findings.

**Link to Teacher Assessment Framework:**The pupil can use the observable features of plants, animals and micro-organisms to group, classify and identify them into broad groups, using keys or other methods.Recap:* Alive/ dead/never been alive.
* What is a habitat/microhabitat?
* Place animals and plants in their habitats.
* Food chains.

**Vocabulary:** Vertebrates, Fish, Amphibians, Reptiles, Birds, Mammals, Invertebrates, Snails, Slugs, Worms, Spiders, Insects, Environment, Habitats**Working scientifically vocabulary:** research (relevant questions), data (gather, record), classify, present, record (drawings, labelled diagrams, keys, tables), oral and written explnations, differences, similarities, changes, evidence, secondary sources, guides, keys  |
| Year 5: * **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**

**Working scientifically:*** recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
* reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations

**Link to Teacher Assessment Framework:**The pupil can name, locate and describe the functions of the main parts of the digestive, musculoskeletal, and circulatory systems, and can describe and compare different reproductive processes and life cycles, in animals. Recap:* grouping living things and classification keys (See Y5 vocabulary)
* changing environments

**Vocabulary**: Mammal, Reproduction, Insect, Amphibian, Bird, Offspring**Working scientifically vocabulary:** report and present (conclusions, casual relationships, explanations, oral and written display and presentation), scientific diagrams, identify, classify and describe |
| Year 6: * **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**
* **give reasons for classifying plants and animals based on specific characteristics**

**Working scientifically:*** recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
* reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations

**Link to Teacher Assessment Framework:**The pupil can use the observable features of plants, animals and micro-organisms to group, classify and identify them into broad groups, using keys or other methods.Recap:* life cycles including reproduction or plants and animals

**Vocabulary:** Classification, Vertebrates, Invertebrates, Micro-organisms, Amphibians, Reptiles, Mammals, Insects**Working scientifically vocabulary:** record data (scientific diagrams, labels, classification keys, tables), record and present (conclusions, causal relationship, oral and written display and presentation), evidence (support, refute ideas or arguments), identify, classify and describe, patterns |