**Living Things and Their Habitats (Y6)**

**NC Statutory Guidance**

Pupils should be taught to:

* 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**

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

* planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
* taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
* recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
* using test results to make predictions to set up further comparative and fair tests
* reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations
* identifying scientific evidence that has been used to support or refute ideas or arguments

**Resources**

Twinkl PlanIt to be adapted.

**Lesson Overview (Statutory in Bold)**

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| WALT | Knowledge to be Taught | Skills to be Taught and Investigations | Vocabulary |
| Give reasons for classifying animals based on their similarities and differences. | Scientists sort and group living things according to their similarities and differences. This is called classification. Scientists who classify living things are called taxonomists. | **To give reasons for classifying plants and animals based on specific characteristics** | Classification  Taxonomist |
| Describe how living things are classified into groups. | About Carl Linnaeus.  Living things can be classified by following the levels in this system. The number of living things in each group gets smaller and smaller, until there will just be one type of animal in the species group. | **To 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** | Domain  Kingdom  Phylum  Class  Order  Family  Genus  Species |
| Identify characteristics of different types of animals.  Classify a creature based on its characteristics. | Each group of animals is defined by a set of characteristics. The animals in a particular group share similar characteristics, and are different to the animals in other groups. | To 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 | Characteristics |
| Describe and investigate helpful and harmful microorganisms. | Microorganisms are very tiny living things. They are so small that they are not visible to the naked eye, so a microscope is needed to see them.  Bacteria are single-celled microorganisms. Bacteria are found in diverse habitats all over the Earth.  Sometimes viruses are called microorganisms, but they are not really alive. They are infectious agents that can replicate only inside the cells of living things. Scientists disagree on whether or not to call viruses microorganisms.  Microorganisms can be helpful or harmful. | To describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals  Cultivate mould on bread | Microorganisms  Dust mite  Plankton  Fungi  Mould  Yeast  Penicillium  Bacteria  Virus |
| Identify characteristics of different types of microorganisms. | All living things are initially grouped into 3 domains: archaea, bacteria and eukaryotes.  The living things in the archaea and bacteria domains are collectively known as the prokaryotes.  Fungi, plants and animals are all eukaryotic kingdoms. | To describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals  Record observations on mould | Domain  Archaea  Bacteria  Eukaryotes |
| Classify organisms found in my local habitat and explain choices. | A field guide is a book designed to help the reader identify the living things that can be found in a particular habitat. | To describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals  Investigate and classify local animals. |  |