Our School Values- Science	
Love	We show love by fostering a joy of discovery.
Courage	We show courage by being brave, challenging thinking, asking questions and investigating new ideas. We show courage knowing that we won't always find the answer.
Unity	We show unity by working collaboratively to discover more.
Inspiration	We show inspiration by not giving up and thinking creatively to seek answers.

Year 6

Science

Living things and their habitat

NC Objectives

- 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

Knowledge I already know

From Year 5:

I know that sexual reproduction is when something makes a version of itself (not identical). Both male and female parents needed.

I know that asexual means not sexual reproduction and only one plant is needed. This produces a clone (identical version).

I know that mammals, through sexual reproduction, give birth to live babies.

I know that birds, through sexual reproduction, lay eggs.

I know that amphibians, through sexual reproduction, lay eggs in water.

I know that insects, through sexual reproduction, lay eggs.

Knowledge I will learn

I know that Aristotle, an Ancient Greek scientist, began organising and dividing living things into specific groups

I know that micro-organisms are incredibly small living things. A microscope is needed to see them in detail. Over a billion years ago, life began on planet Earth. Micro-organisms were the first form of life.

Key Vocabulary

Word	Definition
Characteristic	A typical feature or quality that something/somebody has
Interdependence	Being dependent on each other
Specific	Connected with one particular thing only
Categorise	Put people or things into groups according to what type they are
Primitive	Belonging to an early stage in the development of humans or animals
Hierarchy	A system in which people or things are organised into different levels
Fungus	An organism that grows on plants or decaying matter
Arthropod	An invertebrate with a skeleton on the outside and joins in its legs
Taxonomy	The scientific process of classifying things
Kingdom	One of the five major groups into which all living things are organised
Phylum	A group into which living things are organised, smaller than a kingdom and larger than a class.
Genus	A group into which living things are organised, smaller than a family and larger than a species

Who was the scientist Carl Linnaeus and what did he do?	How do we classify vertebrates?	How do we classify invertebrates?	How do we classify invertebrates that we don't know?	What are micro-organisms?	How do I classify the plant kingdom?
Exemplify each level of Linnaeus' classification.	Make up true/false questions. Observe unusual invertebrates.	Classify annelids, molluscs, arachnids or insects. Plan investigation.	Venn diagram work.	Prediction and plan a mouldy bread experiment.	Advantages and disadvantages of flowering and non-flowering plants.
Challenge: would Linnaeus' system of taxonomy need to change for new species?	Challenge: which vertebrate do you think is the most vital? Why?	Challenge: what other species are there with misconceptions regarding their classification?	Challenge: what are the disadvantages of an animal being sessile?	Challenge: why is it a common misconception that a virus is alive?	Challenge:
ToE / WS	ToE / WS	ToE / WS	ToE / WS	ToE / WS	ToE / WS