Science Topic:	Living Things and Their Habitats		Year 6	

What? (Key Vocabulary)

Spelling	Definition/Sentence
Taxonomy	The part of science focused on classification
Classification	Grouping something using its features
Distinguish	Recognise a difference
Microorganism	A microscopic organism

Who? (Scientists we need to know about)

3 facts about Carl Linnaeus

- Born in Sweden on 23rd May 1707
- A leading light in the field of Taxonomy
- Famous for developing the first system to classify animals effectively

Diagrams and Symbols

Pond Invertebrate Key

Recommended Experiments

A minimum of two experiments should take place during this unit of work with one final written outcome linked to the scientific enquiry skills and approaches used.

- Comparing animals from different habitats locally, in other areas in the UK and abroad
- Designing an investigation to lead another year groups on a bug hunt using these classification keys
- Locating a range of habitats on the school site and interpreting these results

What? (Key Knowledge)

Grouping living things

Animals can be put into one of two groups	Vertebrates or invertebrates

Vertebrates

Vertebrates	Are animals with a backbone
There are 5 ways Vertebrates can be grouped	Fish, amphibians, reptiles, birds, mammals
How to spot a Fish	• Breathes with gills/lays eggs in water/has fins and scales/its body temperature changes
How to spot an Amphibian	• Born with gills then develops lungs/lays eggs in water/damp skin/body temperature changes
How to spot a Reptile	• Breathes with lungs/lays eggs on land/dry scaly skin/body temperature changes
How to spot a Bird	• Breathes with lungs/lays eggs with hard shells/ has feathers/steady body temperature
How to spot a Mammal	• Breathes with lungs/babies are born live/body hair or fur/steady body temperature/feeds babies milk

Invertebrates

Invertebrates	Are animals with no backbone
There are 3 ways Invertebrates can be grouped	• Insects • Arachnids • Molluscs
How to spot an Insect	• 3 body sections/6 legs
How to spot an Arachnid	• 2 body sections/8 legs
How to spot a Mollusc	• Slimy foot/Often have a shell

Deciding which animal or plant is which

Key Features to distinguish between animals	• Invertebrate or vertebrate • Mammal/reptile/fish/amphibian/bird • Colour • Length • Number of legs • Number of body segments • Distinguishing features • Habitat
Key Features to distinguish between plants	• Flowering or non-flowering • Grass/cereal/garden shrub/deciduous/algae/ coniferous/fern • Colour • Height • Number of flowers • Fruit bearing or not • Distinguishing features • Usual location

Microorganisms

Key features of microorganisms	• Include algae, fungi, protozoa, bacteria and viruses • Smallest organisms on Earth • They perform photosynthesis, break down waste and infect other organisms

Builds on: learning in Year 5 - Unit: Living Things and Their Habitats	Learning links	Leads to: learning in KS3 - (Year 7) - Biology