











Who Am I?



What are the key biological facts that I need to know?

Scientific Fact 1	Scientific Fact 2	Scientific Fact 3	Scientific Fact 4	Scientific Fact 5	Scientific Fact 6
All vertebrates have muscles and skeletons that help them to move. The endoskeleton, bones that are inside a body, gives them shape and allows them to stand erect.	Different types of vertebrates have different numbers of vertebrae. Humans have 33 vertebrae, an alligator has 66 vertebrae, and a snake has about 500 vertebrae!	Vertebrates have advanced nervous system, therefore, they are much more intelligent than invertebrates.	Invertebrates cannot make their own food, and therefore, they have to feed off other things to get their energy.	Mammals and birds are warm-blooded, which means that they can make their own body heat even when the temperature outside is low and stays same.	The body temperature of the cold-blooded animals, like reptiles, fish and amphibians depends on the temperature outside.

Key Scientific Vocabulary - words that are related to the topic you are investigating and that must be used in your work	
Word	Definition
amphibian 	An animal, such as a frog, that lives both on land and in water but must produce its eggs in water.
arachnids 	Any of a group of small animals, similar to insects but with four pairs of legs, that include spiders, scorpions, ticks, and mites.
invertebrate 	An animal with no backbone.
key 	A series of questions about the organism's physical characteristics.
mollusc 	Any animal that has a soft body, no spine, and is often covered with a shell.
myriapods 	One of a group of small creatures that have long bodies and many sections with legs, for example centipedes and millipedes.
reptile 	An animal that produces eggs and uses the heat of the sun to keep its blood warm.
vertebrate 	An animal that has a spine.

Sticky Knowledge- what we want you to know at the end of the unit
To know that our senses helps us explore the world around us.

To know what the main classification groups are

- The five main kingdoms are:
 - animal
 - plant
 - fungi
 - monera
 - protist

To know what a classification key is

- a key is a set of questions about the characteristics of living things
- keys are used to identify a living organism or decide which group it belongs to by answering the questions

To know the key characteristics of a vertebrate

- are animals that have a backbone inside their body
- they have a hard skeleton made of bone that holds their body upright
- major groups include:
 - fish
 - amphibians
 - reptiles
 - birds
 - mammals

To know the key characteristics of an invertebrate

- are animals that do not have a backbone
- some have soft bodies, like worms, slugs and jellyfish
- other invertebrates, like insects, spiders and crustaceans, have a hard outer casing called an exoskeleton
- exoskeletons protects their body a bit like a suit of armour

The scientific skills that you will be learning to use to answer the scientific questions

What is science?

Science is the exciting study of the nature and behaviour of natural things and the knowledge that we obtain about them. We ask questions that need answers. In order to answer these questions successfully, you will learn to use all these skills.

Grouping and classifying:

In this type of enquiry, you will make observations and measurements to help you look for similarities and differences. This will help you to organise things into groups and make connections between them.

Can we use the classification keys to identify all the animals that we caught pond dipping?
Can you explain your answer?

Making systematic observations:

You will be making systematic and careful observations and, where appropriate, taking accurate measurements.

How does the variety of invertebrates on the school field change over the year?
Why do you think this happens?