



Aim

• I can identify an invertebrate.

What you will need:

- Invertebrate Identification Sheet.
- Invertebrate Hunt Sheet.
- Invertebrate Classification Key.
- A magnifying glass (if you have one).
- A pencil.





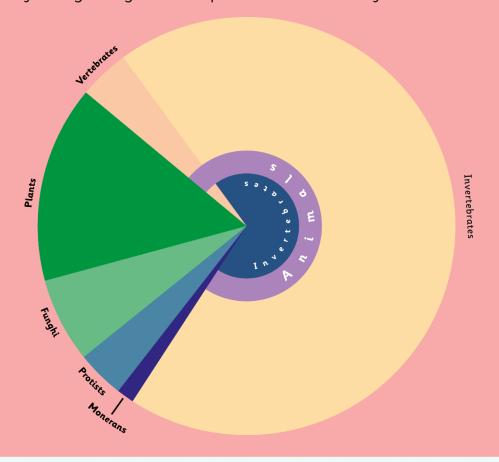
When looking at animals, scientists usually split them into two groups: vertebrates (animals with a backbone) and invertebrates (animals without a backbone).

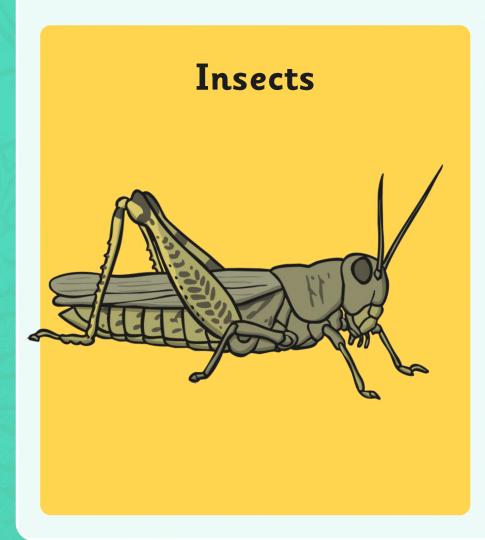
Invertebrates do not have a backbone, or a skeleton made of bones. Many have a hard shell outside their bodies to protect them. Others have soft, flexible bodies.



Classification

More than 80% of living things on the planet, and 98% of animals, are invertebrates.





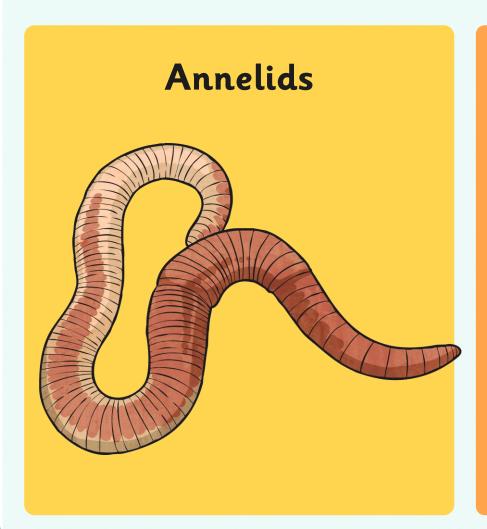
There are over 800 000 different types of insects.

They have an exoskeleton covering their body.

The body consists of 3 parts: the head, thorax and abdomen.

They must shed their exoskeleton in order to grow.

They have a pair of antennae on their head.



They have existed for over 120 million years.

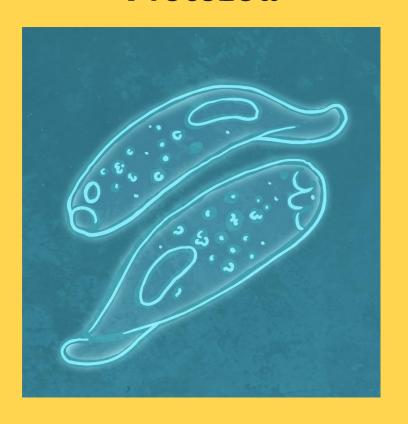
There are over 9,000 species, including worms and leeches.

They have bodies divided into segments.

They don't have any limbs.

Some have long bristles; others have shorter bristles and seem smooth.

Protozoa



They eat tiny algae and bacteria.

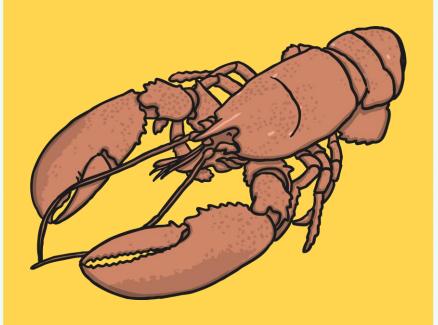
They can only be seen under a microscope.

They are simple, single-celled animals.

They are a source of food for fish and other animals.

They reproduce by splitting in half.

Crustaceans



Most common crustaceans are the crab, lobster and barnacle. Woodlice are also crustaceans.

They have a hard, external shell which protects their body.

They live mostly in the ocean or other waters.

They have a head and abdomen.

Many have claws that help with crawling and eating.

Molluscs



They were among the first inhabitants of the Earth.

They live on land or in water.

Most have a soft, skin-like organ covered with a hard outside shell.

Land molluscs move slowly on a flat sole called a foot.

Ocean molluscs attach themselves to rocks or other surfaces, and can't move.

Arachnids



Most arachnids have 4 pairs of legs.

The first pair of legs may be used for holding their prey and feeding.

Common arachnids are spiders, scorpions, ticks and mites.

They have a hard exoskeleton and jointed legs for walking.

Arachnids do not have antennae.

Echinoderms



They are marine animals that live in the ocean.

Common echinoderms include the sea star, sea urchin, sand dollar and sea cucumber.

They have arms or spines that radiate from the centre of their body.

The central body contains their organs, and their mouth for feeding.

The mouth is underneath, to eat other sea life.

Invertebrates in the Local Environment



A **specimen** is a particular plant or animal that scientists study to find out about its species.

You are going to look for specimens of invertebrates in your local environment.

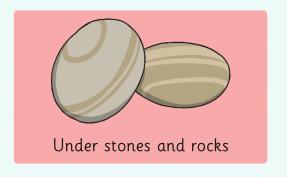
What kinds of invertebrate do you expect to find?

Are there any invertebrates that won't appear in the local habitat?

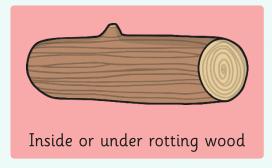


Invertebrates in the Local Environment

Invertebrates often inhabit small homes called microhabitats. Here are some different microhabitats you might find.













Can you think of any more?

Classification



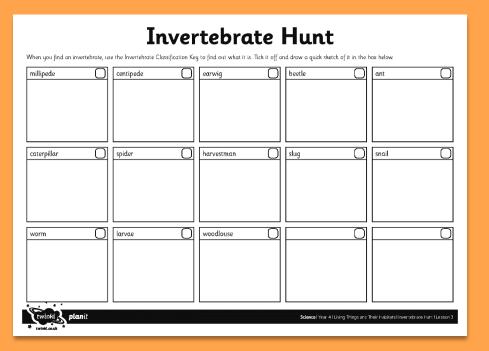
Because invertebrates are so small, they must be handled very carefully. How can we observe and capture specimens without causing them any harm?



Invertebrate Hunt

Go into your garden, a local park or woodland area.

Find, identify and name invertebrates, using your activity sheet.

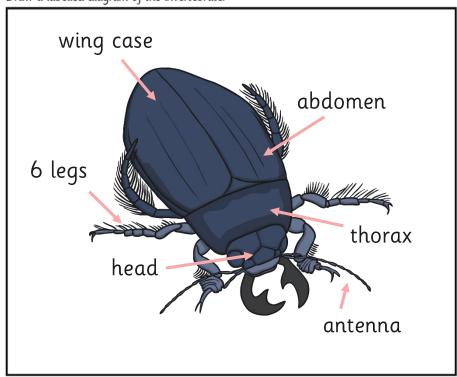


Identifying Invertebrates



Now it is time to identify your specimen! If you spotted lots of invertebrates, choose your favourite.

Draw a labelled diagram of the invertebrate.



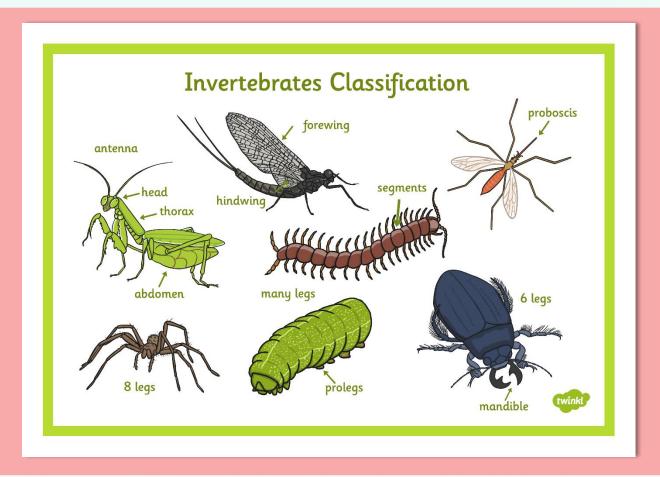
Name of invertebrate: beetle

Habitat where it was found: leaf litter

Characteristics: this invertebrate has 6 legs, a body in 3 parts and a hard wing case. It has antenna. It does not have pincers on its tail.

Hint: to find out the characteristics of your specimen, look at the Invertebrates Classification Key to see the questions you have used to identify it.

Identifying Invertebrates



How Do You Know?



How did you identify your specimen?

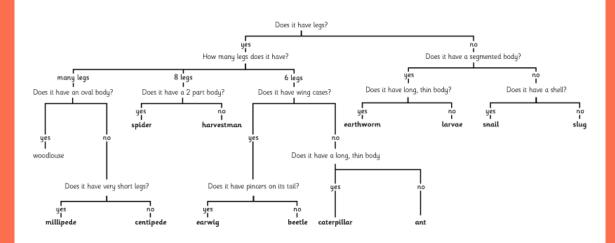
Use the Invertebrate Identification Key and the diagram of your specimen to show a family member how you found out what your invertebrate is called.

Draw a labelled diagram of the invertebrate. wing case abdomen 6 legs thorax head · antenna

How Do You Know?



Invertebrates Classification Key





Science | Year 4 | Living Things and Their Habitats | Invertebrate Hunt | Lesson 3

