# Alternative Science Learning intention — To classify animals based on their characteristics.

# Key vocabulary

Classify –to place living things/objects in to different groups. Scientists place living things in groups based on the features that the living things share.

Characteristics - quality or appearance that makes an individual or a group different from others.

Taxonomist – are scientists who organise species into classifications based on the characteristics of living things.

Species - refers to a group of similar living things that are able to reproduce.

Categories – separated into different groups.

## **Groups of Animals**

Animals can be classified into two groups, vertebrates and invertebrates.

Vertebrates have a backbone, and invertebrates don't have a backbone.

The two groups can be split into further, smaller groups. Groups of invertebrates including insects.

Vertebrates can be sorted into mammals, birds, fish, reptiles and amphibians.





## **Identifying Characteristics**

Each group of animals is grouped by what they look like and how they live. The animals in a particular group share similar characteristics, and are different to the animals in other groups.

There are:

Mammals

Birds

Reptiles

**Amphibians** 

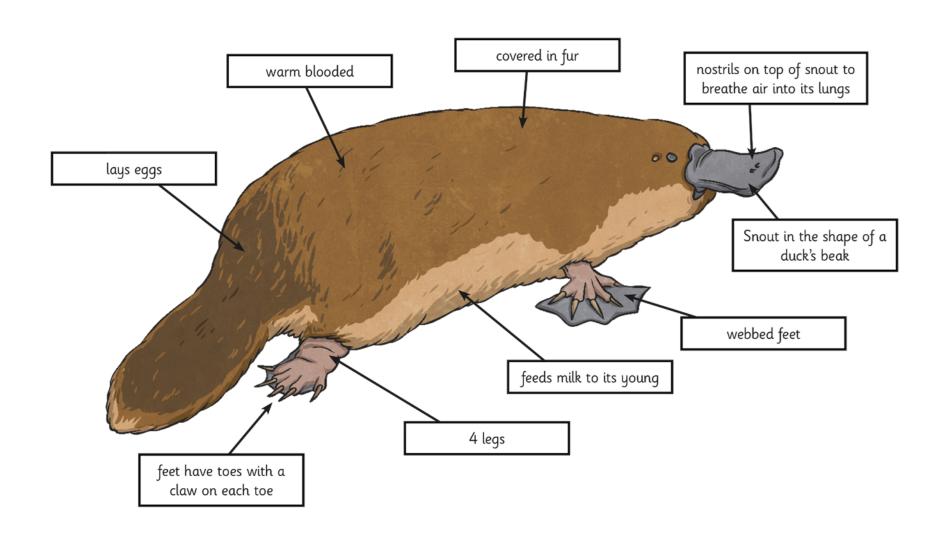
Fish

### **Curious Creatures**

When a new species of animal is discovered, taxonomists watch it and look at what it looks like and how it lives and then decide how to classify it. However, some animals are so unusual that scientists struggle to classify them.

The platypus was discovered in 1797, and scientists around the world joined to classify this unusual animal. It seemed to have characteristics from lots of different types of animals!

Look at the Platypus Diagram and its characteristics on the next slide and write down which groups of animals this curious creature could fit into.

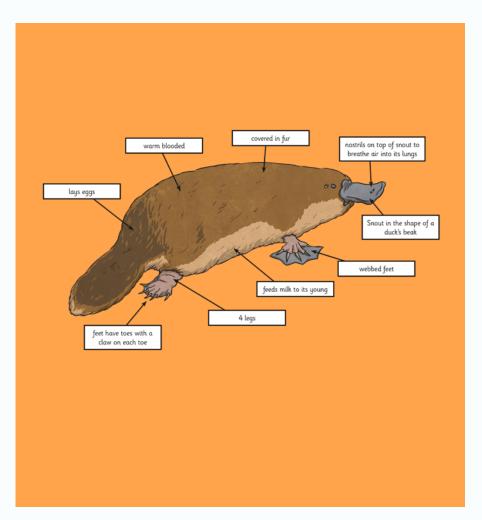


## **Classifying Curious Creatures**

It took scientists nearly 100 years of to agree on a classification for the platypus!

Some thought it was a **reptile**, because it lays eggs. Others thought it was a **bird**, because of its beak shaped snout and the facts that it lays eggs and is warm blooded.

It is now agreed that the platypus is a **mammal**, because it has fur, it feeds milk to its young and it is warm blooded. It does not have wings or feathers, so can't be a bird. It does not have hard scaly skin, so cannot be a reptile.



### Your task...

You are going to create you own animal and classify it as either a mammal, a bird, a fish, an amphibian or reptile.

Use the characteristics sheet to help you classify the animal. For example your new animals might have fur, be warm blooded, live on land but lay eggs. It has three characteristics of a mammal and only one of a bird so it would be classified as a mammal.