### Classifying Organisms

### **Learning Intention:**

Can I recall simple ways of grouping organisms according to their characteristics?

### Can you match each organism to the correct label?

plant





reptile

mammal





insect

amphibian





crustacean

bird





arachnid

fish



mollusc



How many did you get right?







mammal







amphibian

insect





fish

plant





mollusc

arachnid





crustacean

Which features do they have that help you identify which group they belong to?





Living things (organisms) can be split into two groups: plants and animals. Broadly speaking, plants are anchored to the ground but animals are not.

There are lots of ways of grouping plants and animals according to the organisms' characteristics. Animals, for example, can be split into vertebrates and invertebrates.

Vertebrates are animals that have a backbone.



Invertebrates are animals that do not have a backbone. This group includes animals with an exoskeleton, like beetles.



Vertebrates include mammals, amphibians, reptiles, fish and birds. Although they have backbones in common, there are lots of differences between these groups. Let's recap...

### **Mammals**

Warm-blooded vertebrates with hair or fur. Give birth to live young. Females feed offspring with their own milk.



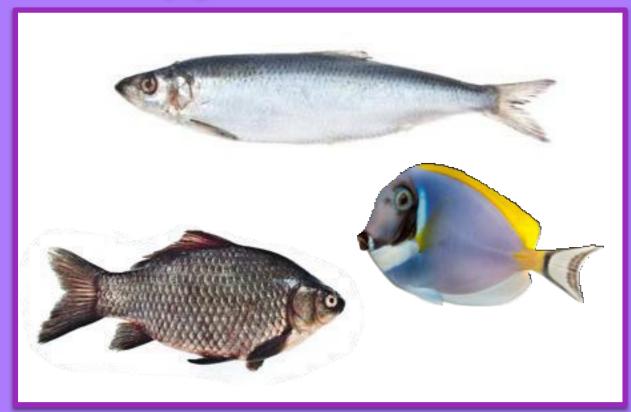
### **Birds**

Warm-blooded vertebrates with feathers and beaks.
Most can fly. Lay eggs which develop into young.



### <u>Fish</u>

Cold-blooded vertebrates that live entirely under water. Have fins and gills to take in oxygen from water.



### **Reptiles**

Cold-blooded vertebrates with dry, scaly skin. Usually lay soft-shelled eggs on land.



### **Amphibian**

Cold-blooded vertebrates that can live both on land and in water. Begin life with gills but develop lungs as they grow.

Let's look at some of the groups of invertebrates. How many can you name?





## Insect Invertebrate with six legs and generally one or two pairs of wings.



#### Mollusc

Invertebrate with soft, unsegmented bodies. Many have a hard outer shell.



## Invertebrates with an exoskeleton, many legs and antennae.



Some people use the term 'insect' to describe all creepy crawlies but this is not scientifically accurate.

#### **Arachnid**

Invertebrates with eight jointed legs. In some, the front set of legs are sensory.



### **Echinoderm**

Invertebrate with spiny skin, such as a starfish or sea urchin.

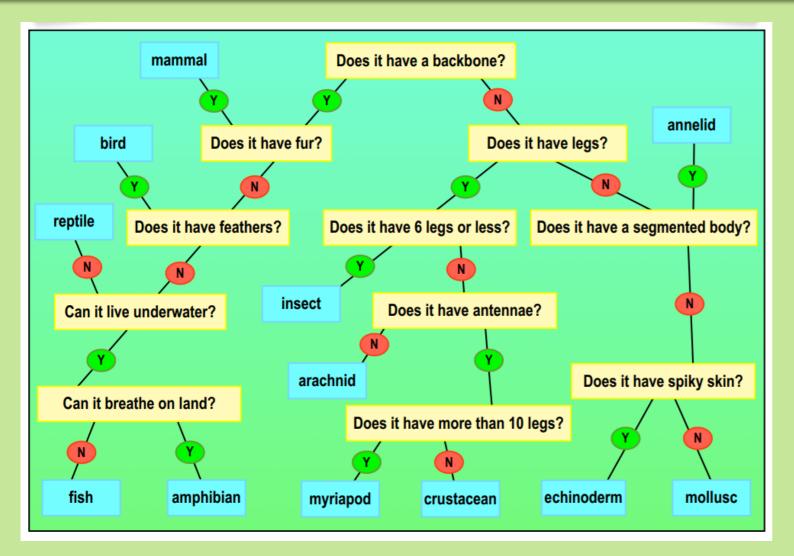


### **Annelid**

Invertebrate with no legs and a segmented body, such as an earthworm.



# Myriapod Invertebrate with many legs and body segments, such as a centipede.



This is a classification key.

It is a quick way to categorise any animal simply by asking a series of questions.



