Classifying Organisms

Learning Objective:

To recap ways of grouping organisms according to their characteristics.

Can you match each organism to the correct label?

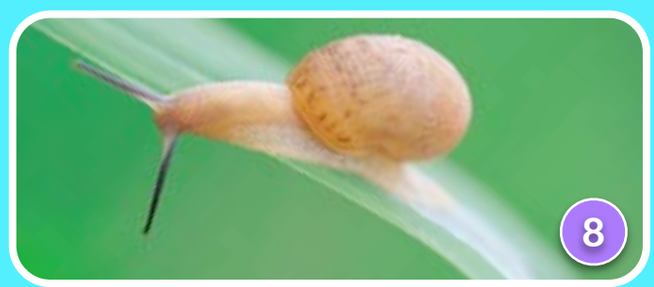
plant

mammal

amphibian

bird

fish



reptile

insect

crustacean

arachnid

mollusc

reptile

mammal

bird

amphibian

insect

fish

plant

mollusc

arachnid

crustacean

How many did you get right?

reptile

mammal

bird

amphibian

insect

fish

plant

mollusc

arachnid

crustacean

How did you know which organism belonged to which group?

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.

Fish

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.

Crustacean

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

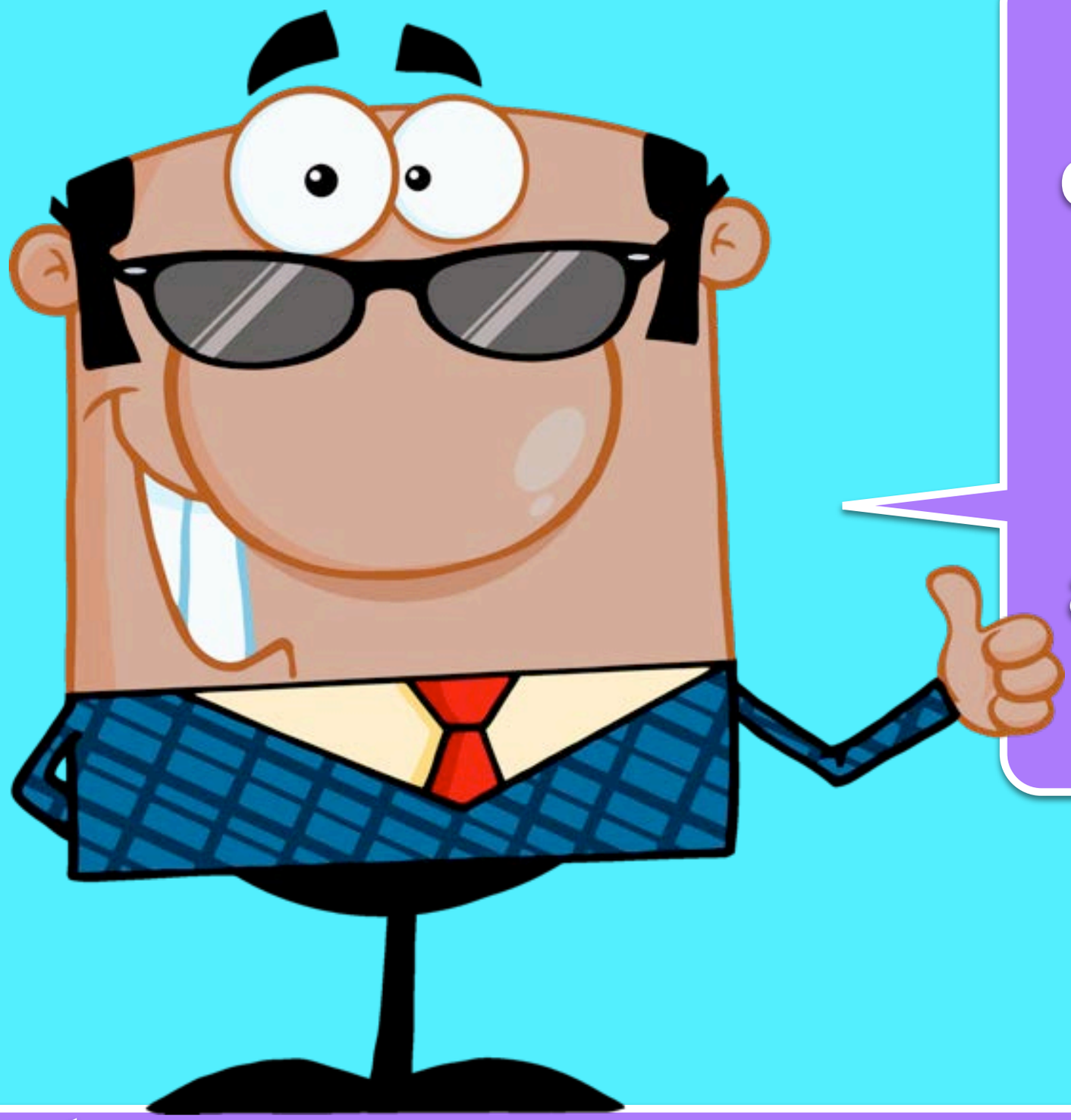
Invertebrate with spiny skin, such as a starfish or sea urchin.

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.



Good work everyone! Who is ready to go and put their knowledge of animal groups to the test?