

Classifying Conundrums



Aim

- I can give reasons for classifying animals based on their similarities and differences.

Success Criteria

- I can sort and group animals based on their features.
- I can give reasons for the way I have classified animals.

WHAT IS CLASSIFICATION?

How many different species of living things are there on Earth?



Scientists believe that there could be as many as 10 million different species on Earth! It would be very hard to study the lives and behaviours of all these living things without grouping them together somehow.

Scientists sort and group living things according to their similarities and differences. This is called classification. Scientists who classify living things are called taxonomists.

Sorting and Grouping



Again, there are several ways you could split these snacks into two groups.

They could be grouped into 'Fruits' and 'Vegetables'.



Sorting and Grouping



Taxonomists classify living things by comparing them. Let's look at an example of how this works.

Look at the snacks on this table. How could we group them? Taxonomists would start by splitting them into two large groups. Can you think of two groups to use to split up the snacks?

There are several ways you could split these snacks into two groups.



Sorting and Grouping



Let's say you split them into
'Healthy' snacks and 'Unhealthy'
snacks.

Now each group can be split into
another two groups. Look at the
'Healthy' snacks. How could you
split them into two smaller
groups?

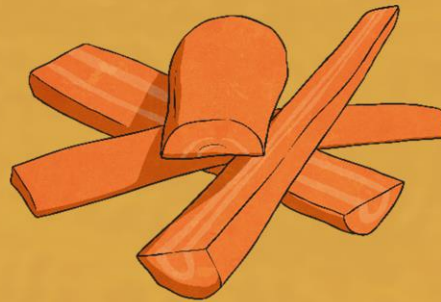


Sorting and Grouping



Now, the 'Vegetables' group can be split up into two smaller groups.

They could be split into 'Roots' and 'Florets', or even 'Carrots' and 'Broccoli'.



Sorting and Grouping



This is how taxonomists classify living things. They group similar things together, then split the groups again and again so they become smaller and smaller. Each group allows scientists to observe and understand their similarities and differences more clearly.


















Classification Conundrum



Zoo Animals List

These animals are going to live in a new zoo. You need to classify the animals so that similar species can be housed near to each other. Use the Zoo Classification Activity Sheet to classify the animals.

 lion	 chameleon	 tarantula	 lobster
 hissing cockroach	 giraffe	 poison dart frog	 macaw
 chimpanzee	 octopus	 giant snail	 komodo dragon
 Galapagos penguin	 spectacled bear	 meerkat	 emu

Imagine that a new zoo is going to open in your local area. You have been asked to sort and group the animals that will live in the zoo, so that similar species can be housed in enclosures near one another.

You will act as a taxonomist, so it is up to you to decide how to classify the animals and give reasons for your classification.

Look at the animals on your Zoo Animals List and use the Zoo Classification Activity Sheet to sort and group the animals.

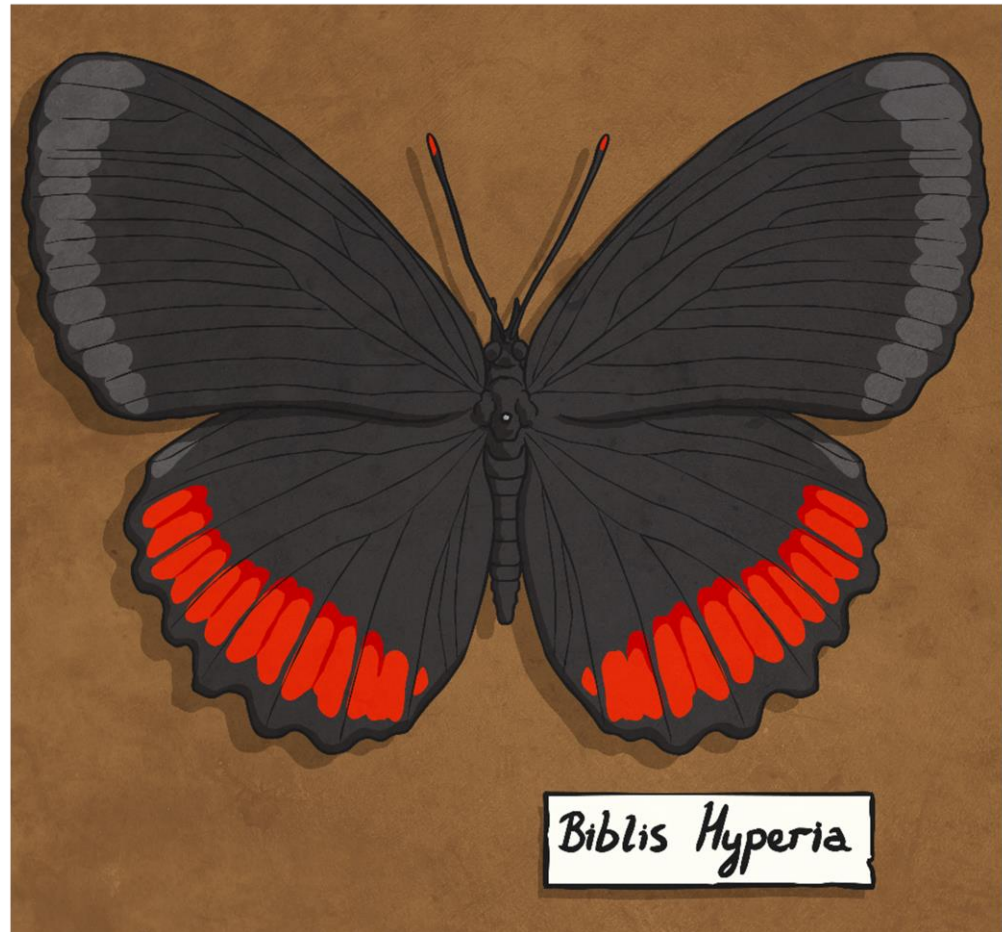
A Single Method?





Talk to other people in your group about how they classified the animals in their zoo. Did they sort and group the animals in the same way as you did?

Do you think taxonomists use different classification methods like you may have done? Is it important to use the same method of classification?

In your next lesson, you will find out about the standard method of classifying living things.



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hissing cockroach	giraffe	poison dart frog	macaw
			
chimpanzee	octopus	giant snail	komodo dragon
			
Galapagos penguin	spectacled bear	meerkat	emu

For One Star - use these animals to put into groups.

For Two Star - use the animals on the next page

For Three Star - group all the animals

Present your work however you would like (try and make it as clear as you can!) in your study books.



tapir



tiger



spider monkey



angelfish



piranha



otter



jaguar



sloth



terrapin



stick insect



blue morpho butterfly



toad



python



caiman



flamingo



fruit bat