

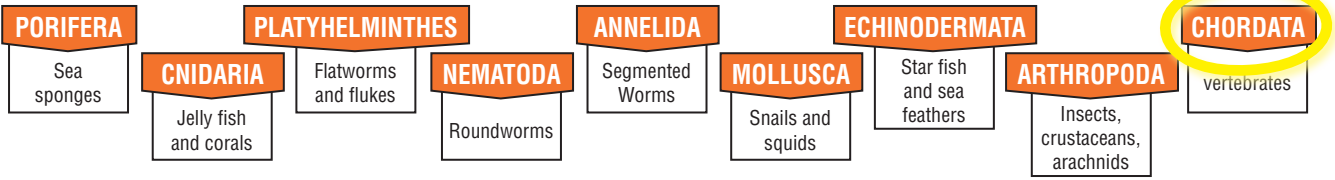
CLASSIFICATION KS4

Taxonomy is the science of organising and naming organisms, there are billions of different types of organism on the planet, so it's a very big job! Let's look at how taxonomists organise animals using a Red Fox as an example.

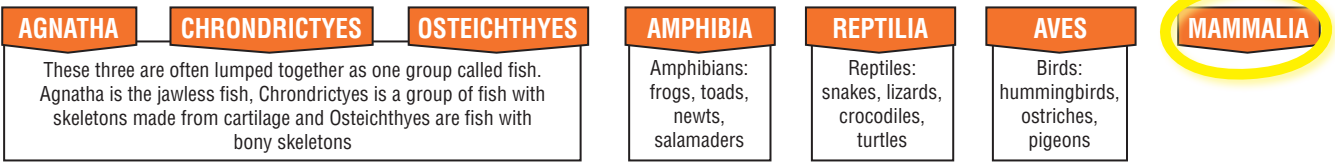
First the taxonomist must decide which **kingdom** the organism belongs to, there are 7 kingdoms:



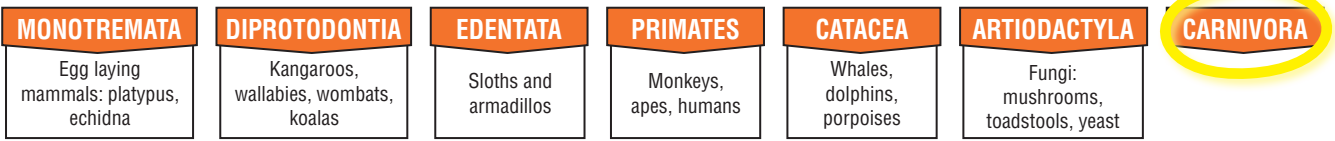
The fox is an animal, the next layer is the **phylum**, there are 36 phyla. Only 9 of these 36 phyla contain the majority of organisms living today. The rest include various organisms that have been classified from the fossil record.



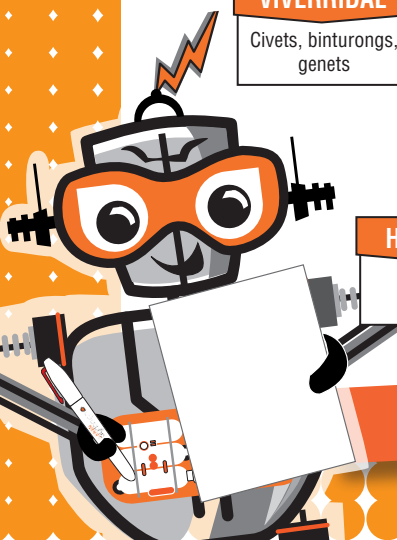
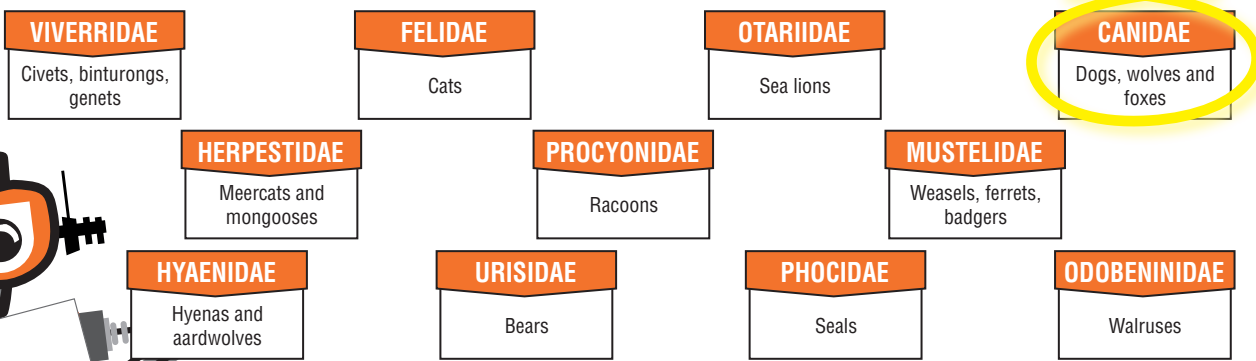
The fox has a spine, so it is in the Chordata phylum. The next level of organisation is the **class**. Within the Chordata phylum there are 7 classes.



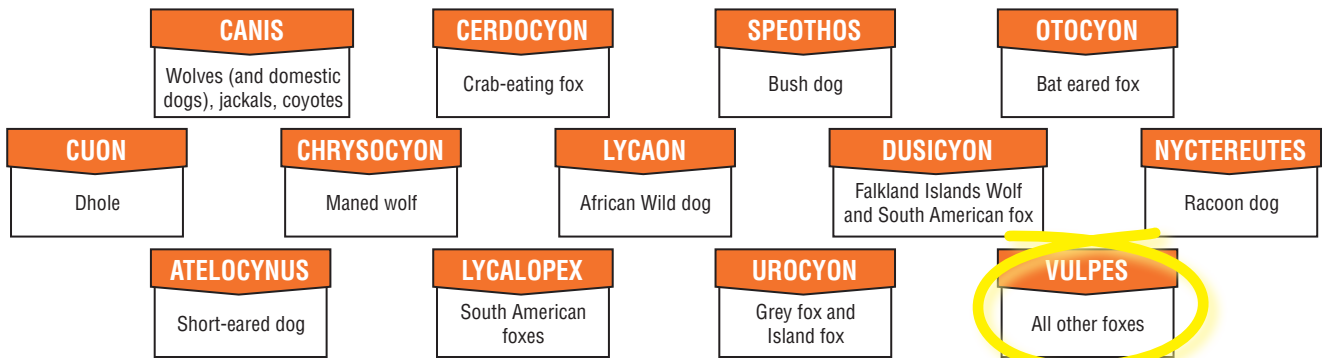
The fox has fur and feeds its young with milk, so it is in the Mammalia group. The next level of organisation is the **order**. Within the Mammalia group there are about 26 orders, below are just a few examples.



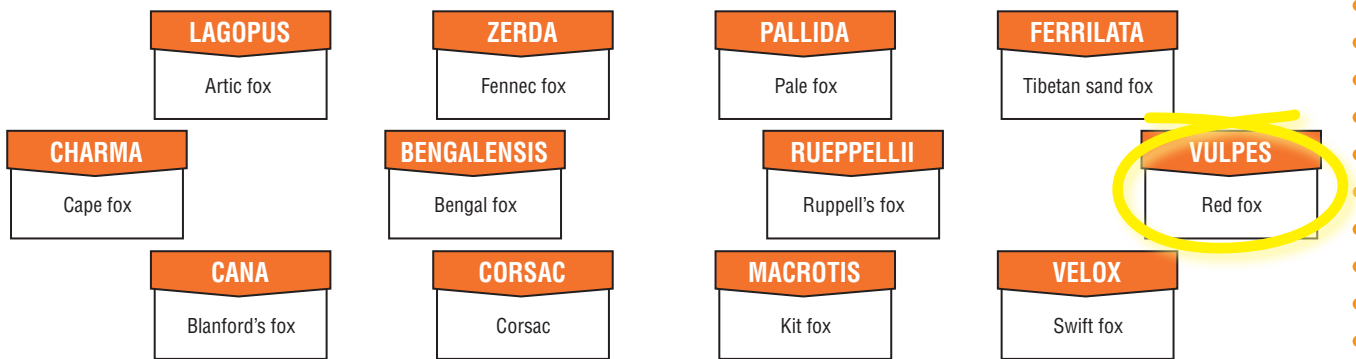
The fox belongs to the order carnivora, not because it eats meat, but because it shares a similar tooth structure! Not all carnivores belong in this order, and not all animals in this order are carnivores! The next level of organisation is the **Family**. Within the Carnivora order there are about 11 families.



The fox belongs to the Canidae family! Next we look at what Genus the fox belongs to. Within the Canidae family there are 13 genera.



The red fox belongs in the Vulpes genus. In some genera there are lots of different species, in other there is only one, for example: the cuon genus only has one species and that is the Dhole
Within the Vulpes Genus there are 12 species.



So the species name of the red fox is vulpes! When writing down an animals scientific name you should write in *italics*. The genus name has a capital letter, but the species name does not. So the scientific name for the red fox is *Vulpes vulpes*. It can also be written as *V. vulpes*.

What is the scientific name for the fennec fox?

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What phylum do frogs belong to?

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What class does a robin belong in?

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Sloths belong to which order?

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Why do you think it is important to group organisms to this extent?

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Research your favourite animal and find out it's classification.

Share your own findings on social media

#LEARNBYDESIGN
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#STEMATHOMELBD

HAVE FUN WITH STEM AT HOME