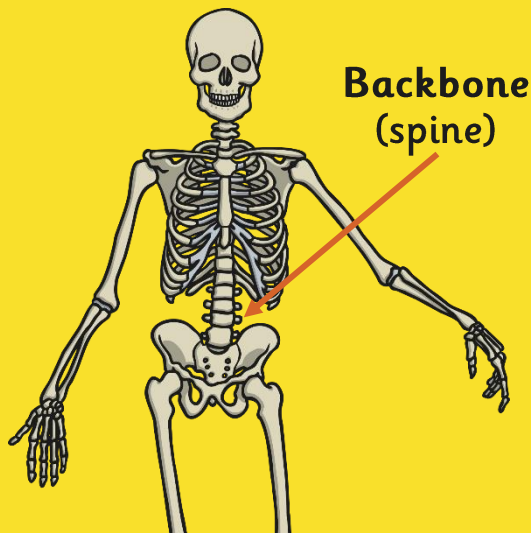


Types of Skeletons

Vertebrates and Invertebrates

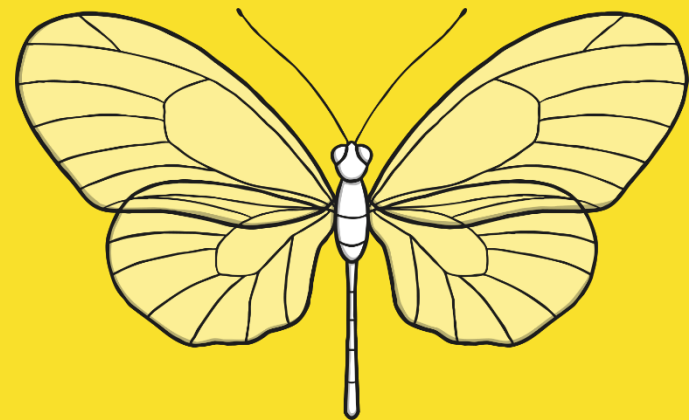
The difference between vertebrates and invertebrates is simple!

Vertebrates have a backbone (spine)...



vertebrate

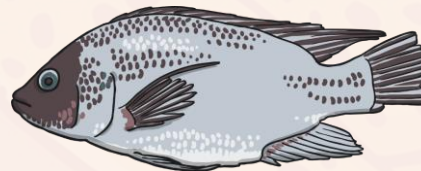
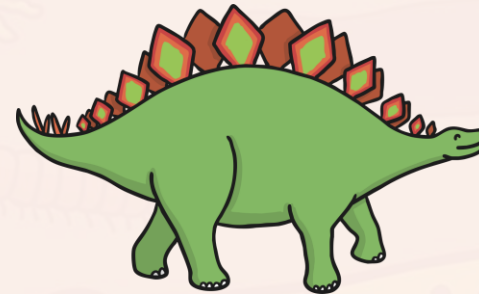
...and invertebrates don't



invertebrate

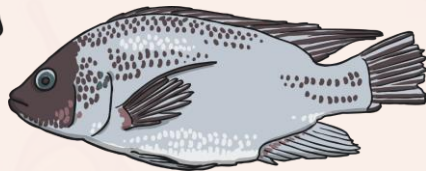
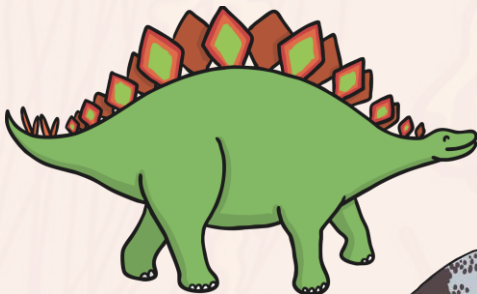
Now let's see if you can categorise animals as vertebrates or invertebrates.

Discuss which animals are vertebrates and which are invertebrates?



ANSWERS!

Vertebrates



Invertebrates



Types of Skeletons

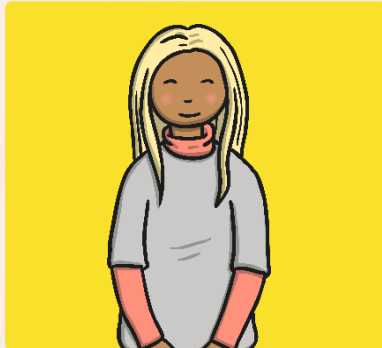
A further classification of skeletons comes from if an animal has a skeleton and where it is.

All vertebrates have an endoskeleton. However invertebrates can be divided again between those with an exoskeleton and those with a hydrostatic skeleton.

vertebrate



endoskeleton



invertebrate



exoskeleton



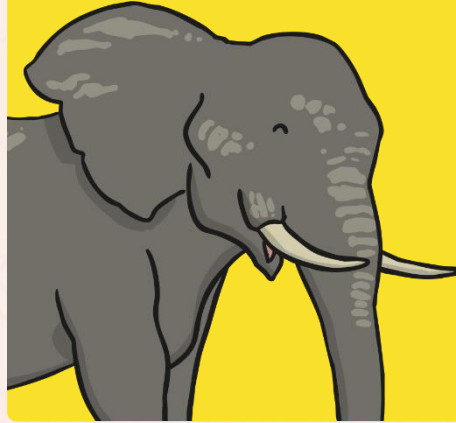
hydrostatic skeleton



Discuss what do you think the words endoskeleton, exoskeleton and hydrostatic skeleton mean?

Endoskeletons

Animals with endoskeletons have skeletons on the inside of their bodies.



Endoskeletons are lighter than exoskeletons.



As the animal grows so does their skeleton.



Exoskeletons

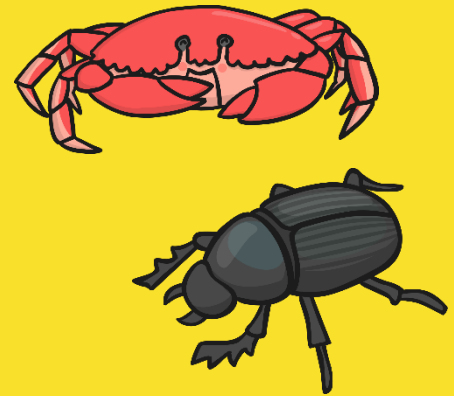
Animals with exoskeletons have their skeletons on the outside!



The animal has to shed its skeleton and produce a new one!

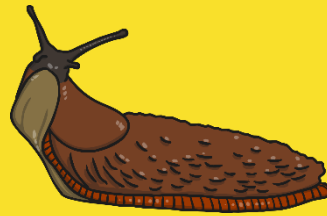


Exoskeletons do not grow with the animal.



Hydrostatic Skeletons

Animals with hydrostatic skeletons don't actually have any bones!



All animals with hydrostatic skeletons are invertebrates.

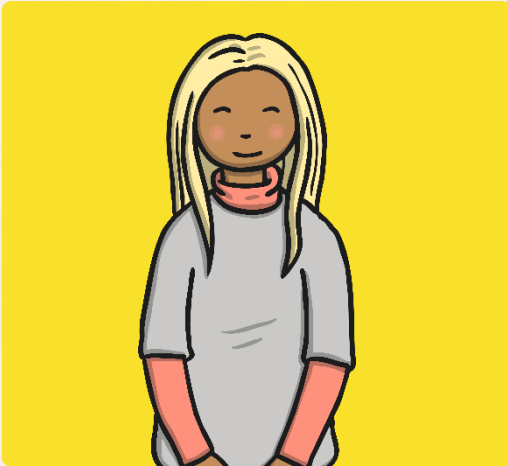


Instead these animals have a fluid-filled compartment in their body called a coelom.



Skeleton Types

endoskeleton



exoskeleton



hydrostatic skeleton



Discuss with a partner. Can you think of an example of an animal with an exoskeleton, endoskeleton or hydrostatic skeleton?