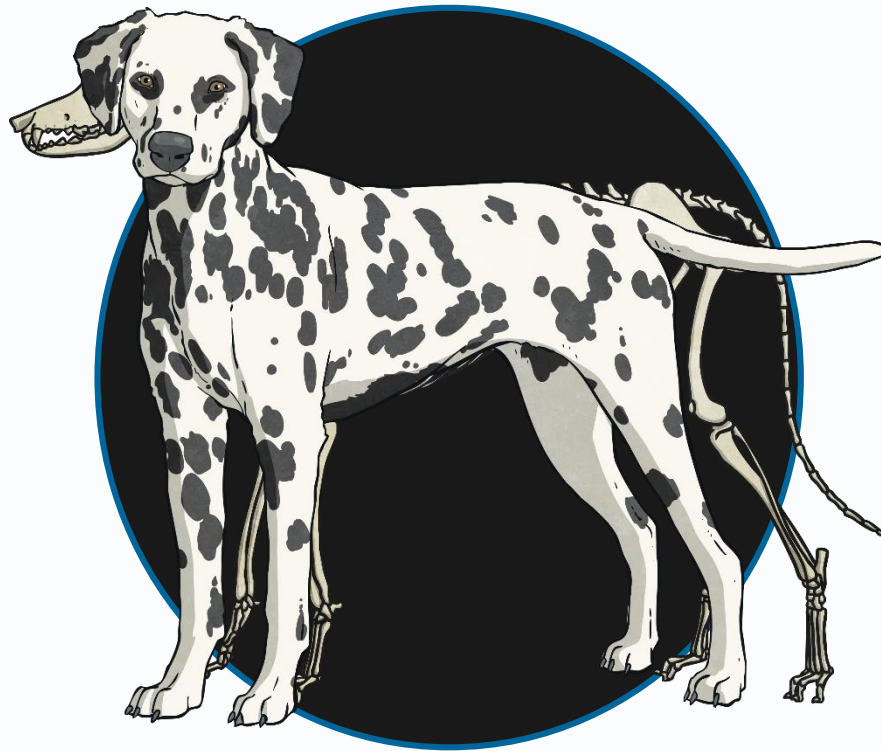


What is a  
skeleton?

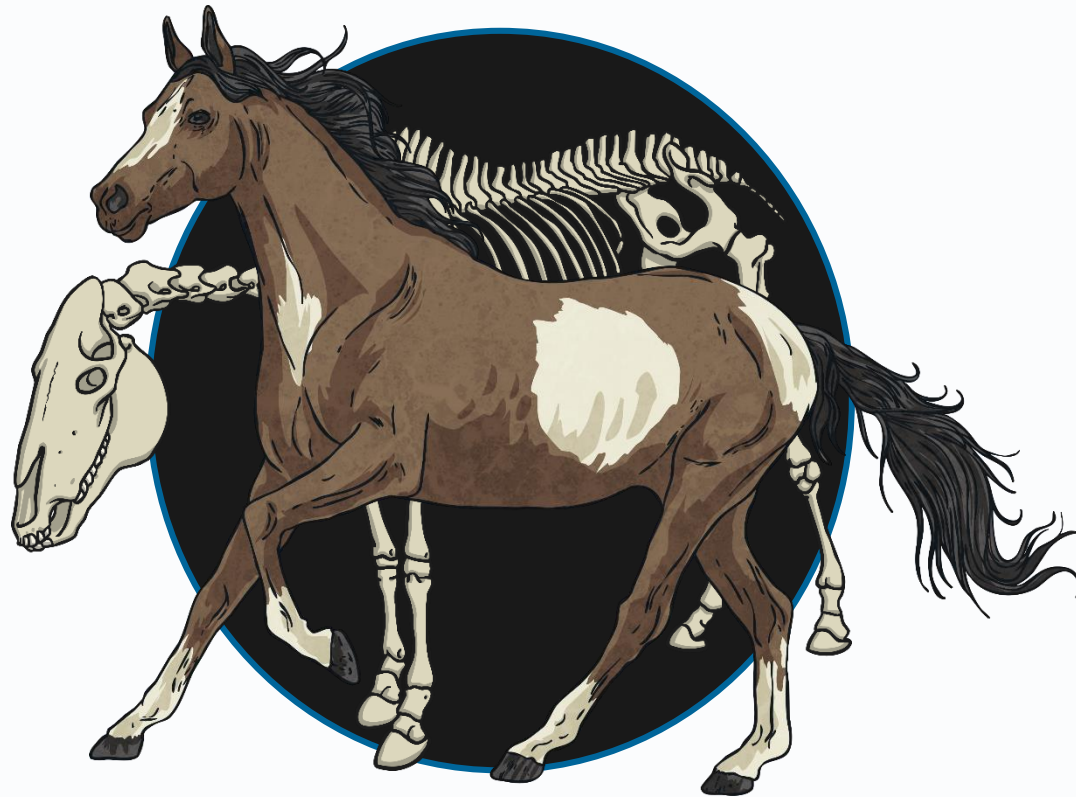
# Guess the Animal

Can you guess which animal this skeleton belongs to?



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# Guess the Animal

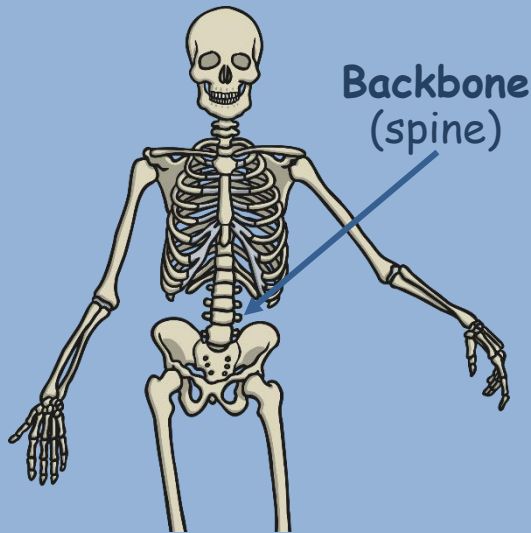
Can you guess which animal this skeleton belongs to?



# Vertebrates and Invertebrates

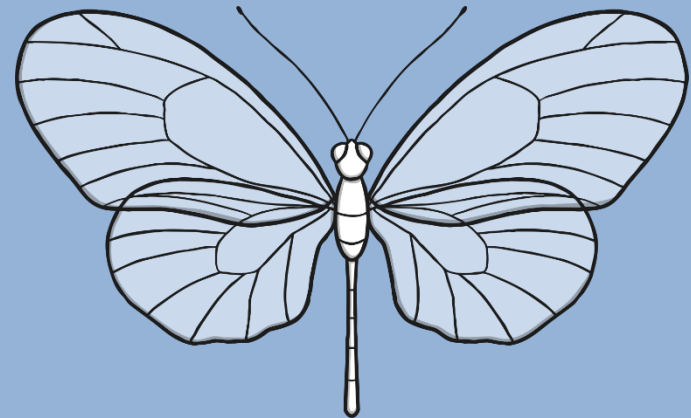
The difference between vertebrates and invertebrates is simple!

Vertebrates have a backbone  
(spine)...



**vertebrate**

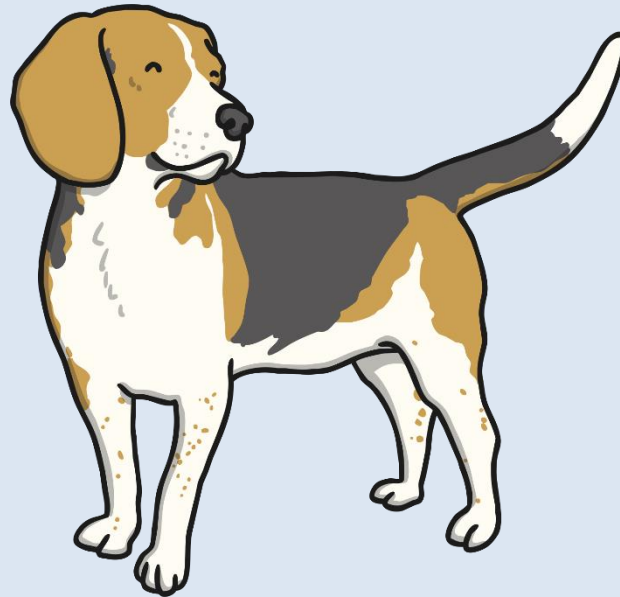
...and invertebrates don't



**invertebrate**

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

# Dog



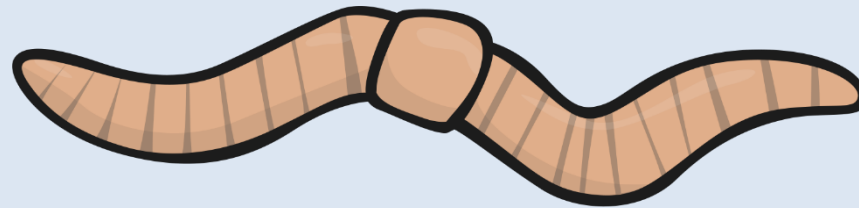
Vertebrate ✓

or

Invertebrate ✗



# Worm

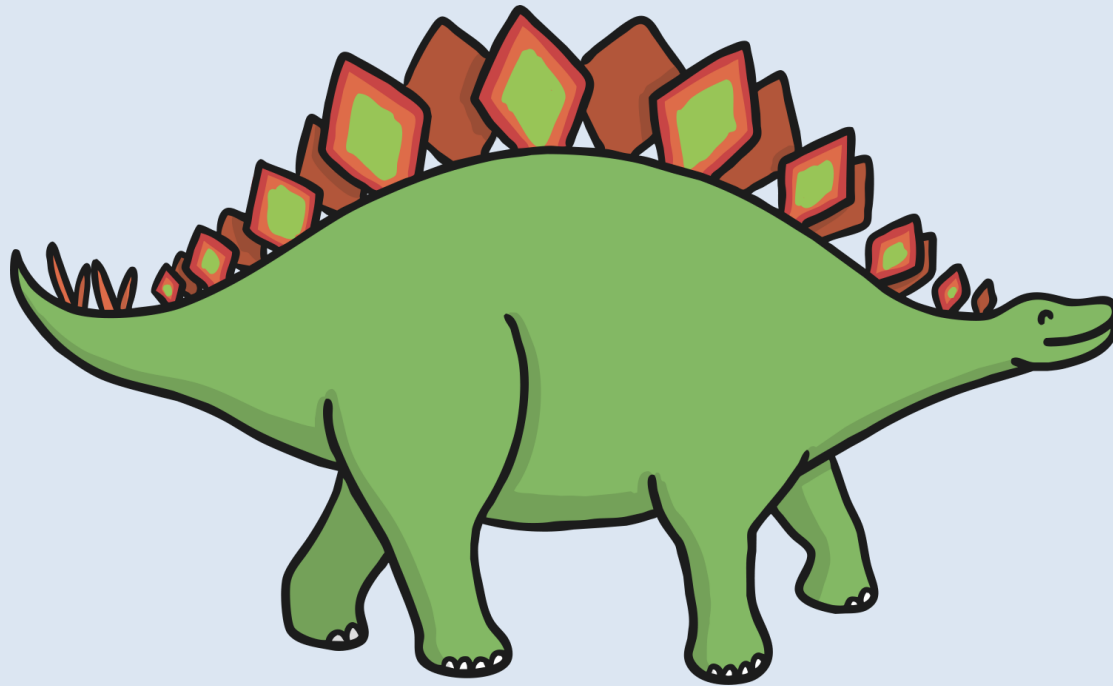


Vertebrate X

or

Invertebrate ✓

# Dinosaur



Vertebrate ✓

or

Invertebrate ✗

# Human

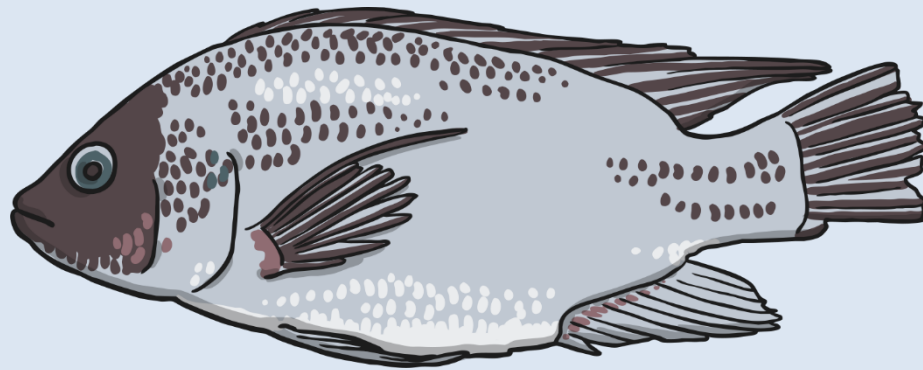


Vertebrate ✓

or

Invertebrate X

# Fish



Vertebrate ✓

or

Invertebrate ✗

# Jellyfish



Vertebrate X

or

Invertebrate ✓

# Butterfly

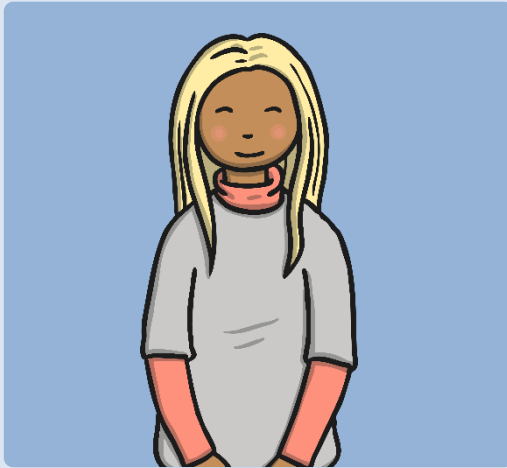


Vertebrate X

or

Invertebrate ✓

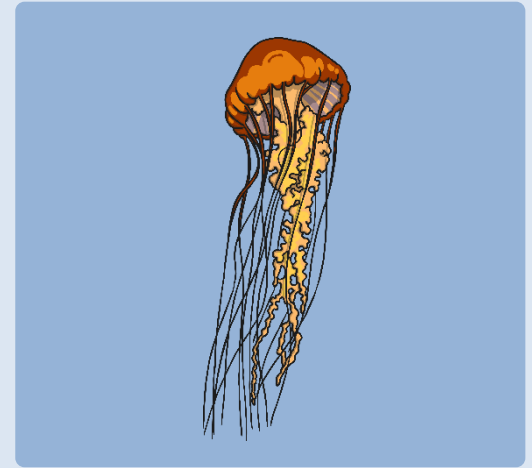
endoskeleton



exoskeleton



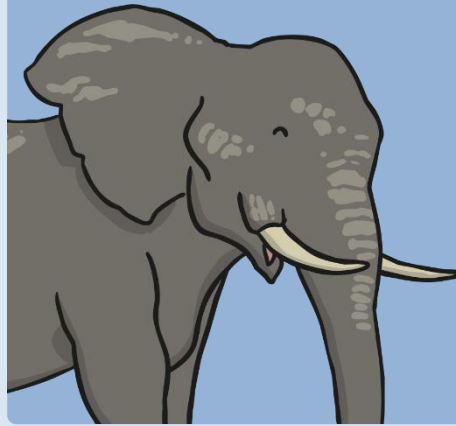
hydrostatic skeleton



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

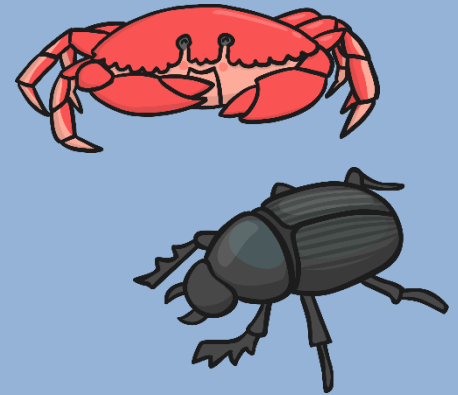
Animals with exoskeletons have their skeletons on the outside!



Watch the following clip to see how they shed their skeletons (click the crab below).

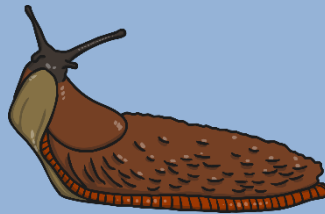


Exoskeletons do not grow with the animal. Therefore the animal has to shed its skeleton and produce a new one!

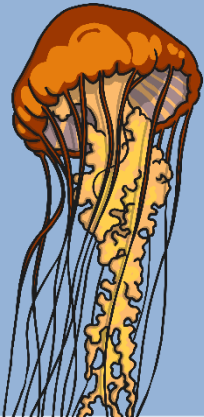


# Hydrostatic Skeletons

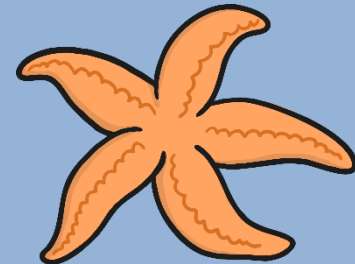
Animals with hydrostatic skeletons don't actually have any bones!



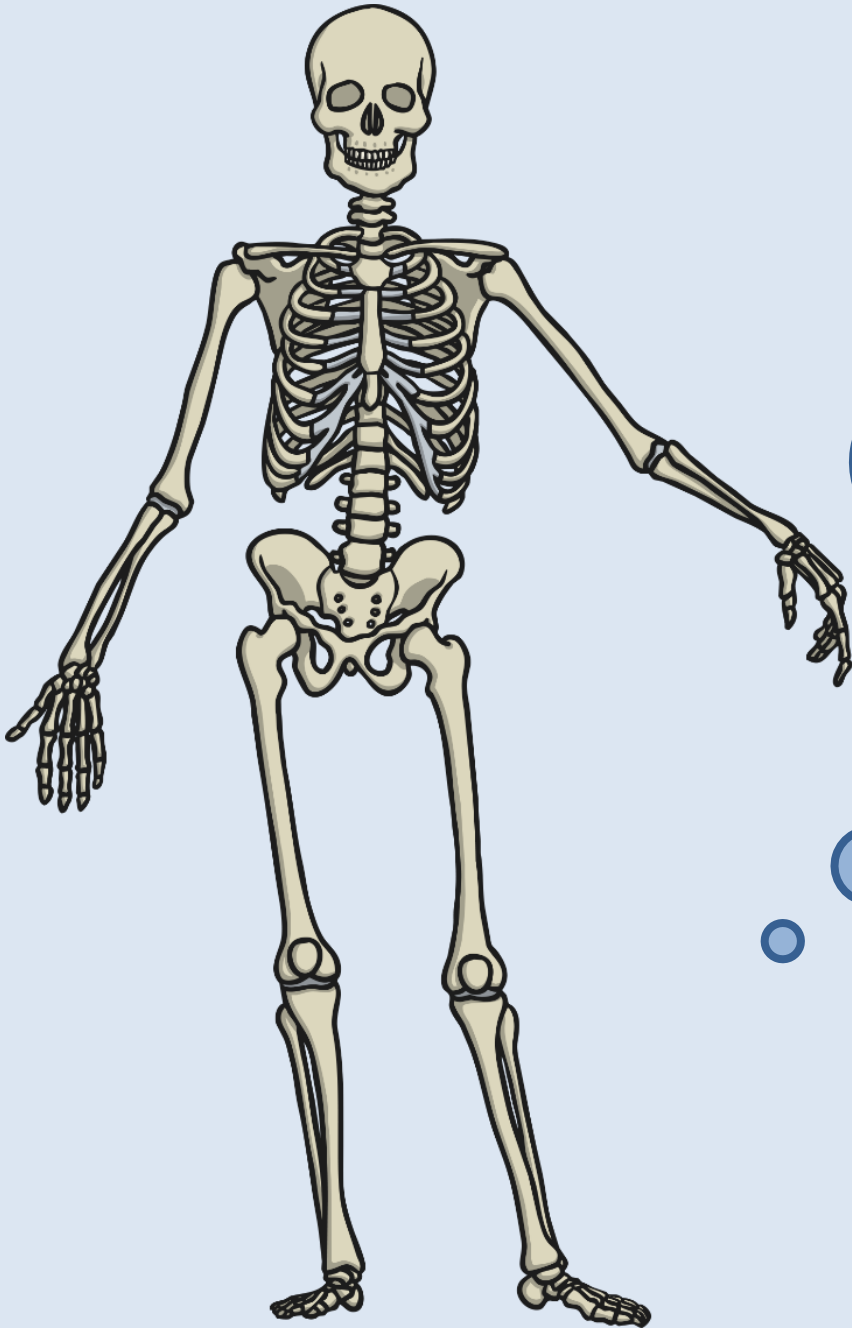
All animals with hydro-static skeletons are invertebrates.



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






# Sorting Skeletons



What is the  
function of  
a skeleton?

# Pros and Cons of Different Skeleton Types

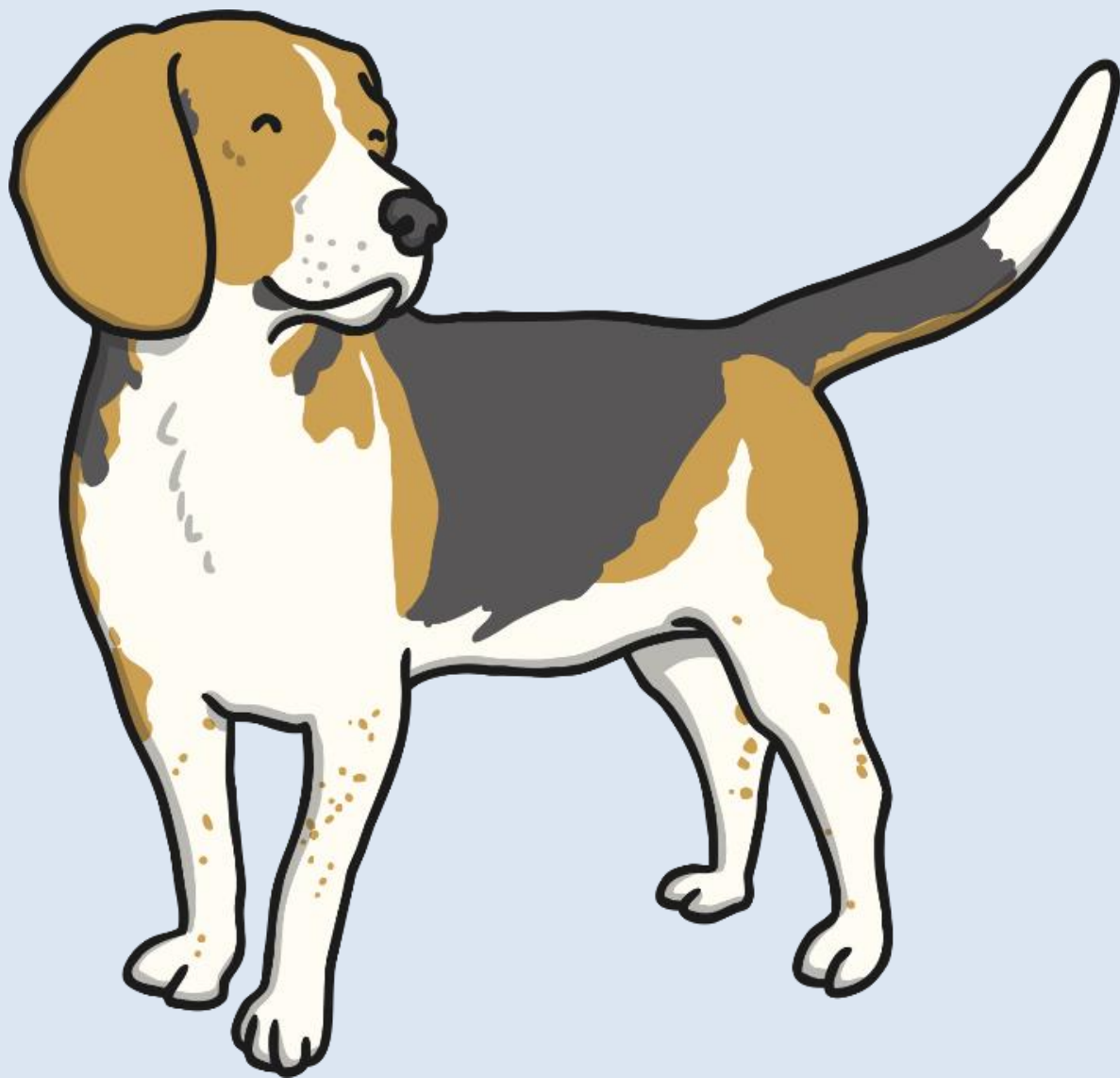


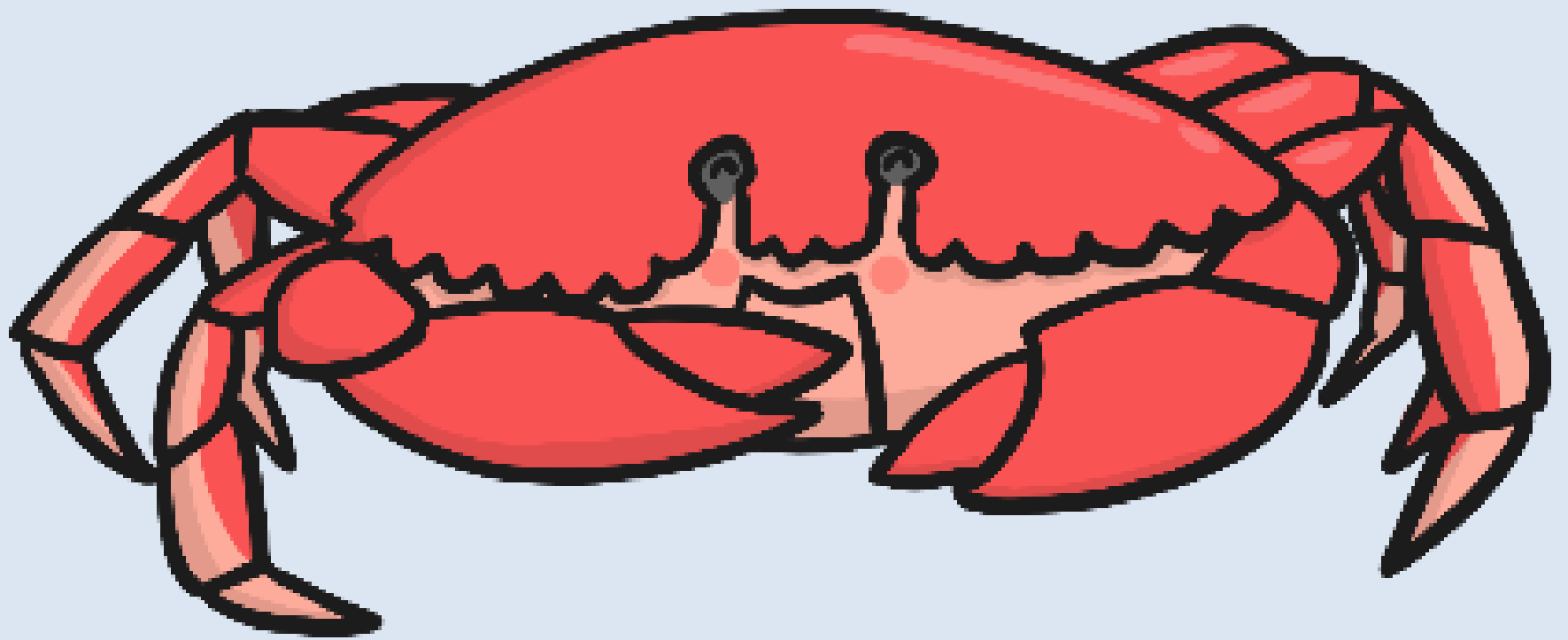
Type of Skeleton	Pro	Con
Endoskeleton 		
Exoskeleton 		
Hydrostatic Skeleton 		

Grows with the body  
More protection for the body

Does not grow with the body  
Body is more flexible

Cannot lift objects  
Muscles are less flexible

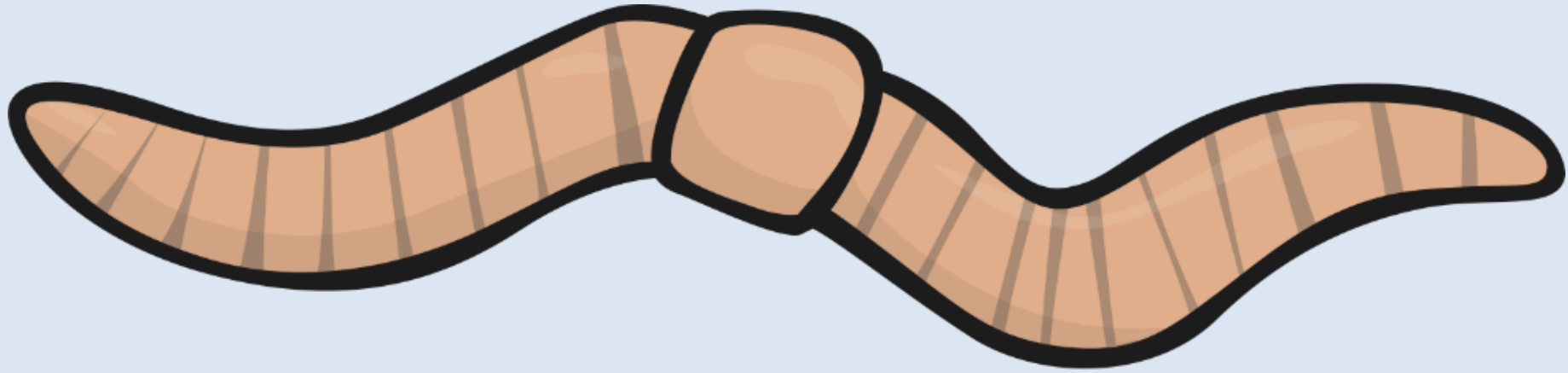


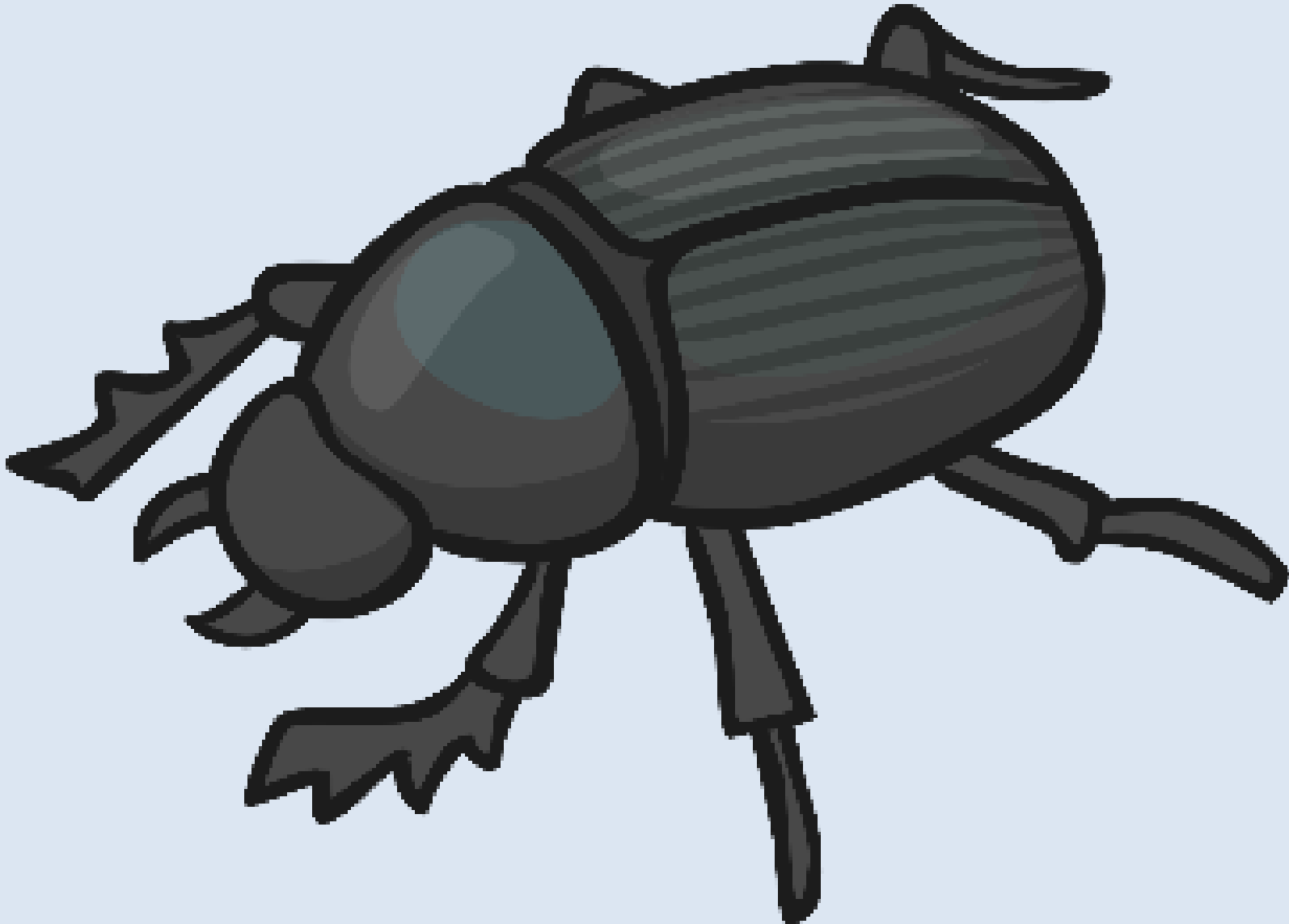












Choose an animal.

Draw a picture of your animal and write down what type of skeleton it has.

Explain why the skeleton is suitable for that animal.