

Canonbury Home Learning
Year 3 Science

Lesson 7

LO: identify that humans and some other animals have skeletons and muscles for support, protection and movement.

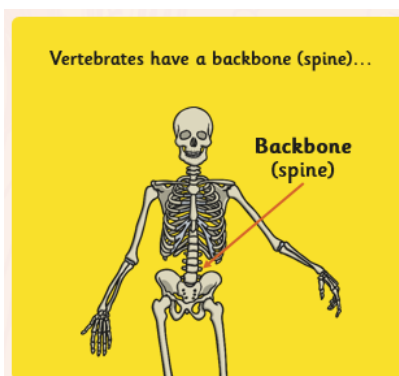


If you can, start by watching these clips all about skeletons:

<https://www.bbc.co.uk/teach/class-clips-video/science-ks2-how-do-muscles-and-bones-work/zfgtscw>

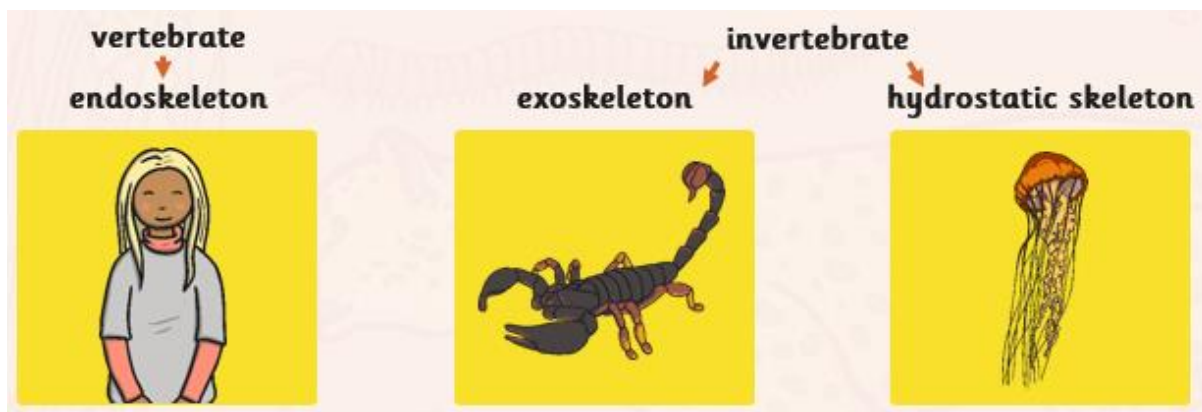
<https://www.bbc.co.uk/bitesize/clips/zmj8q6f>

Not all animals have skeletons like ours. We can classify living things depending on if they have a back bone (spine) or not. We call these **vertebrates** or **invertebrates**:



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.



Endoskeletons

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

As the animal grows so does their skeleton.

Endoskeletons are lighter than exoskeletons.



Exoskeletons

Animals with exoskeletons have their skeletons on the outside!

Exoskeletons do not grow with the animal. Therefore the animal has to shed its skeleton and produce a new one! Here is a clip of a crab getting rid of his old exoskeleton: <https://vimeo.com/37438364>



Hydrostatic Skeletons

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




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



Task: Create a poster or presentation (you can do this using film/power point/purple mash) about the different types of skeletons living things have.

You need to find out at least 3 examples of animal that have each skeleton (endoskeleton, exoskeleton, hydrostatic skeleton) and research the pros and cons of each type of skeleton.

Use research to complete this table to help you with your poster:

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