

The Skeletal System



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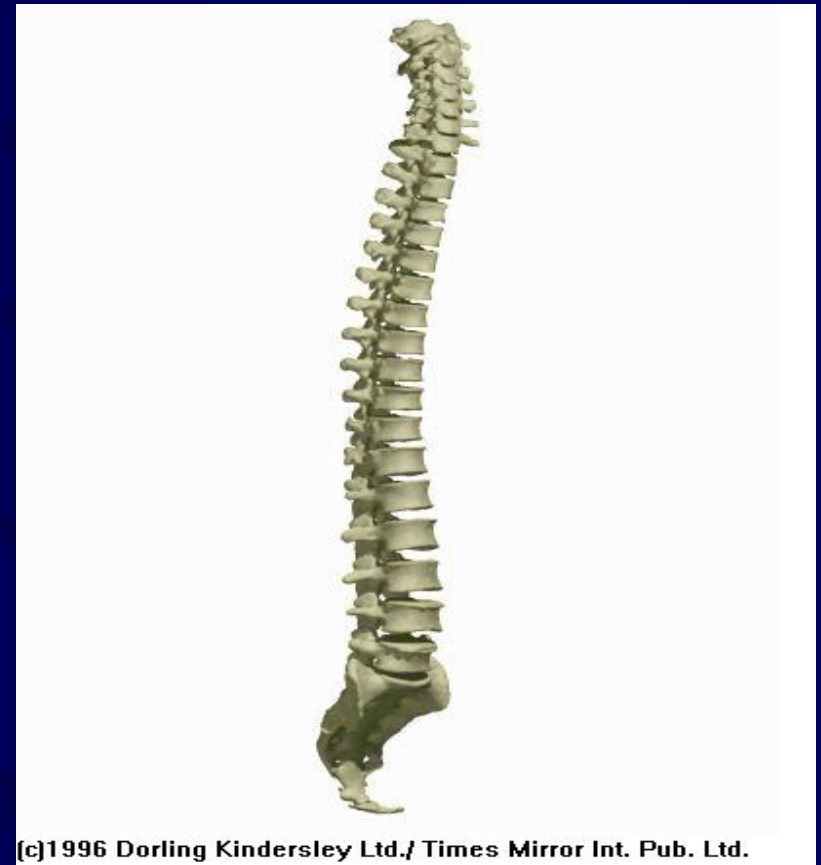


- The Skeleton makes up about 18% of the weight of the body.
- It is made up of a little more than 200 bones.

The Skeletal System

Our Torso:

The Vertebral
Column

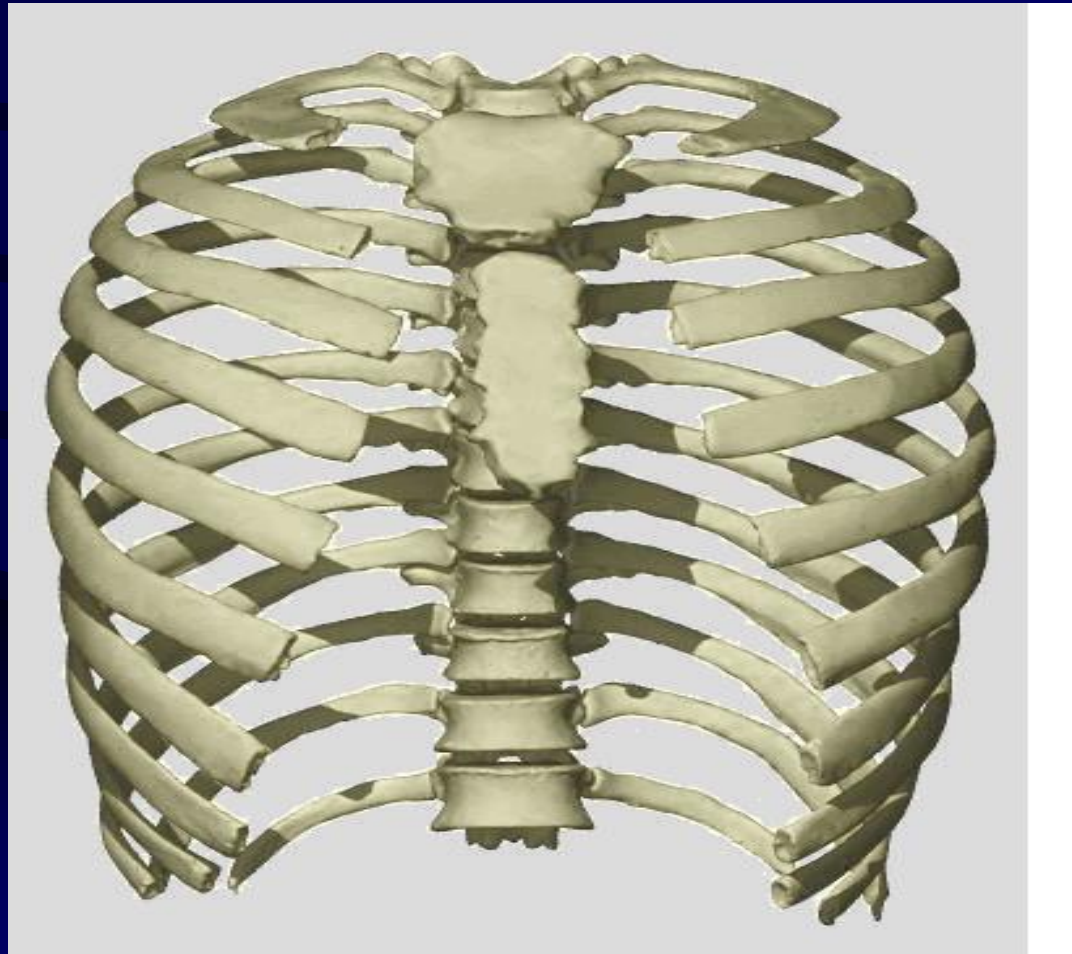


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The Vertebral Column

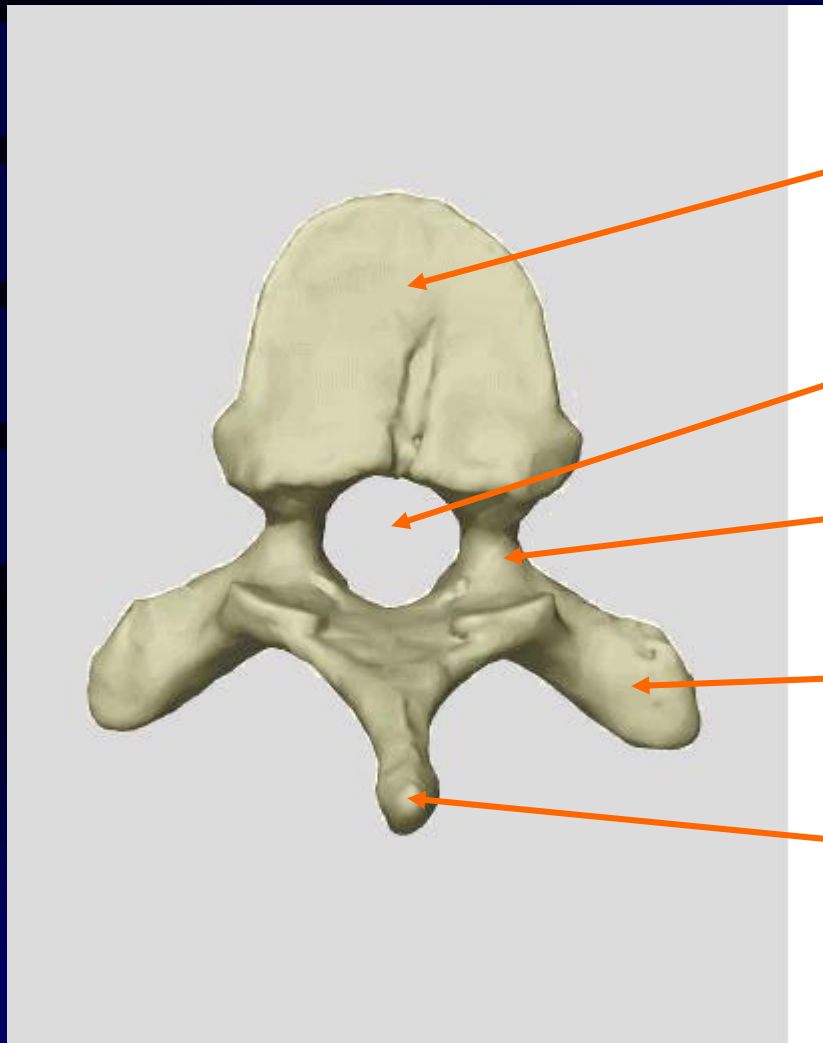
- A series of bones running the length of the back and forming the central axis of the body is called the vertebral column or backbone.
- The individual bones of this column are called vertebrae.

The Vertebrae and Ribs



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Individual Vertebrae--5 Parts



Centrum

Vertebral foramen

Neural Arch

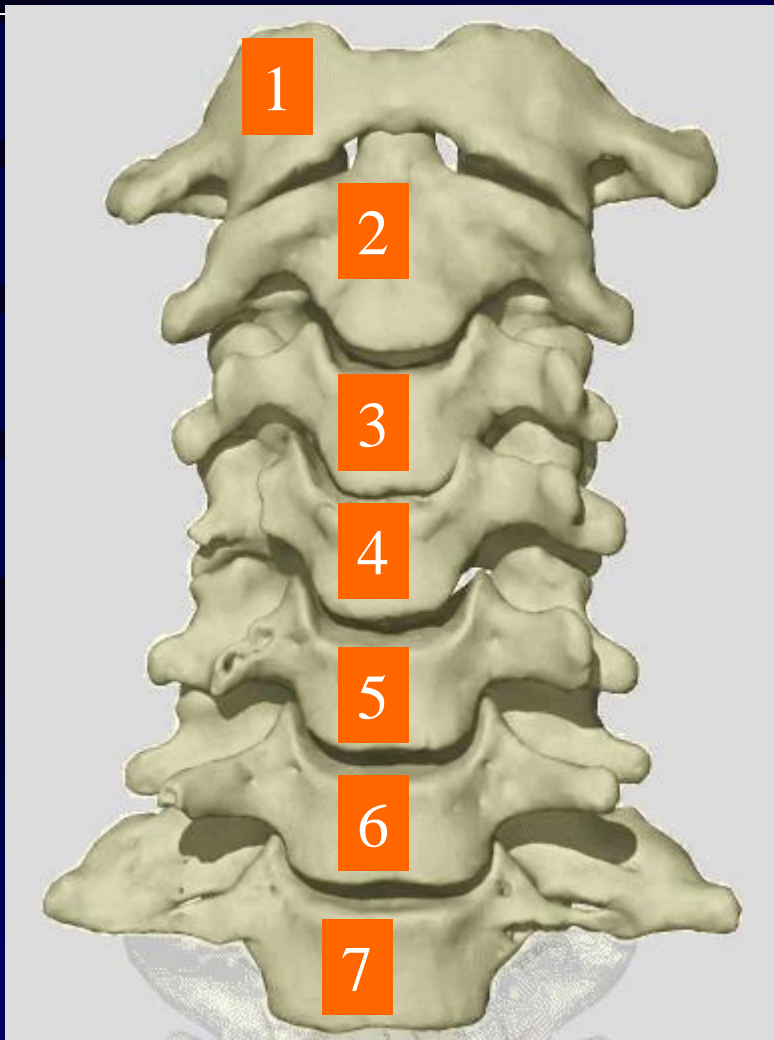
Transverse Process

Spinous Process

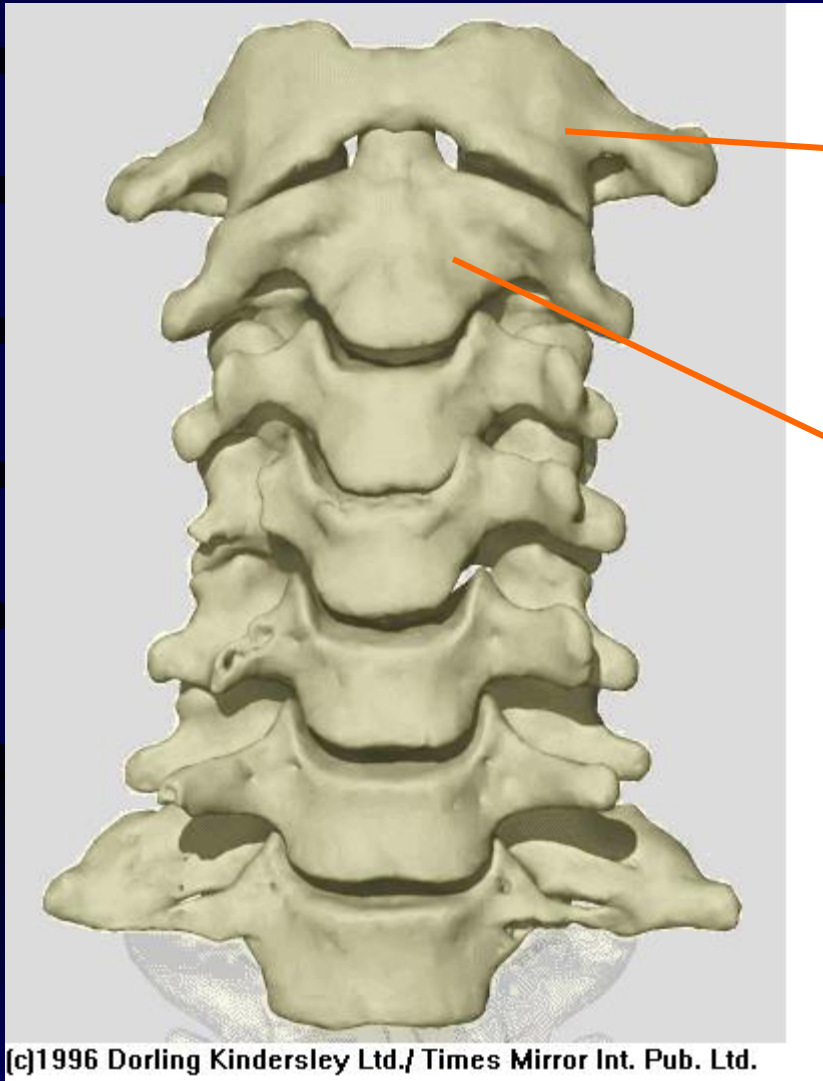
The Backbone is Divided into 5 Groups

Group 1: The most superior of
them, the Cervical Vertebrae
or neck.

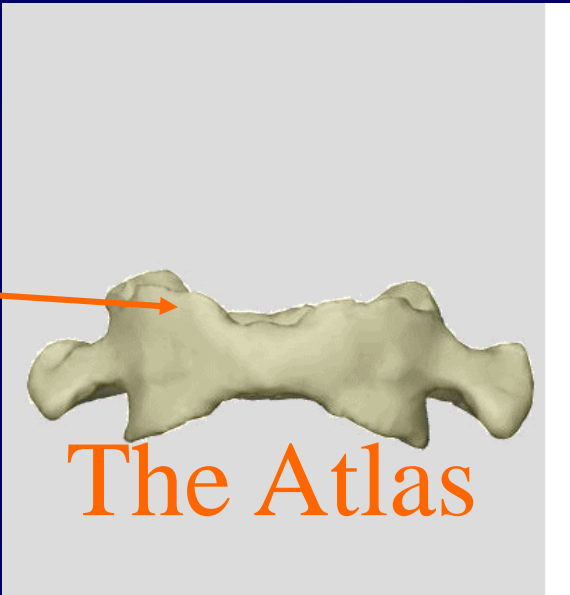
The Cervical Vertebrae



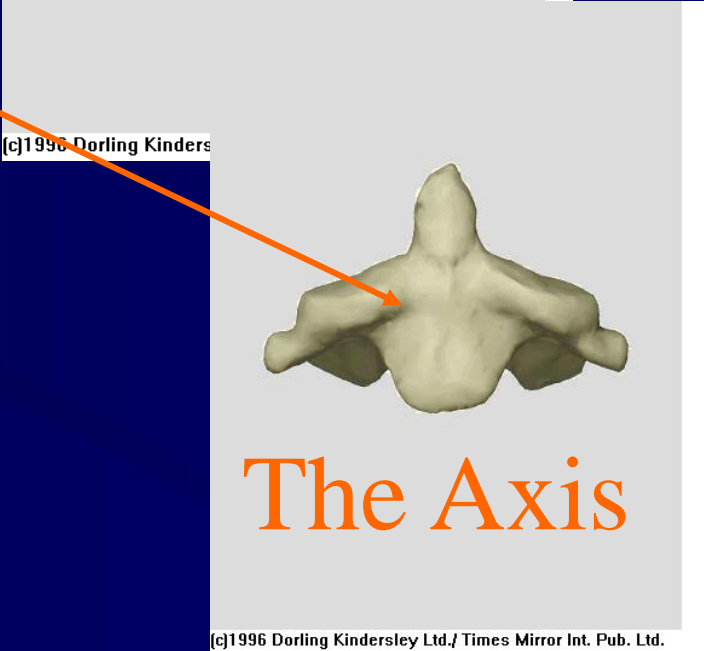
There are 7
vertebrae
in the neck



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The Atlas



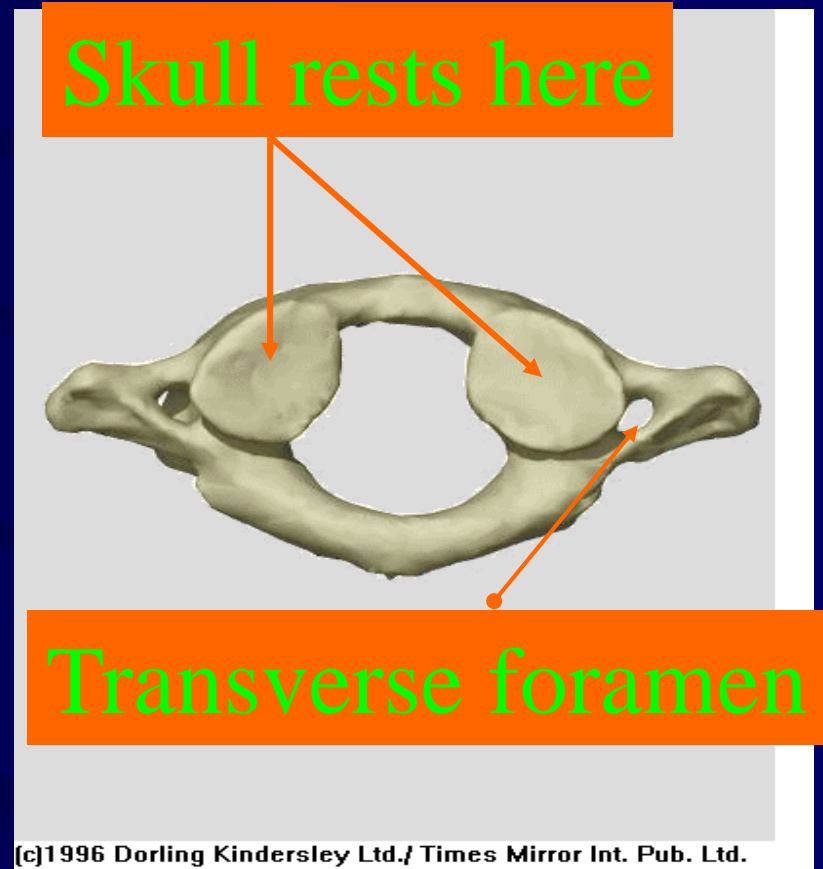
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The Axis

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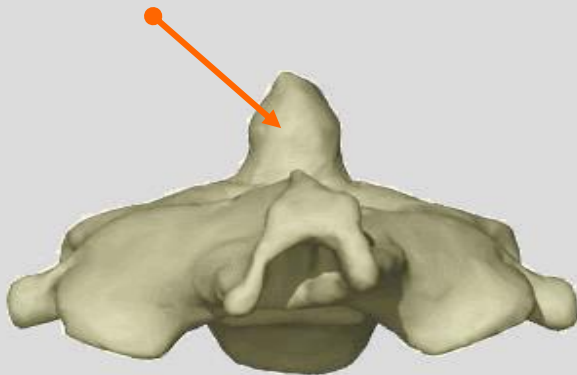
The Atlas

- Is modified to support the skull.
- Is also called C1.



The Axis

Odontoid Process



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- The skull and atlas rotate with the axis.
- The atlas rotates around the odontoid process.
- The axis is also called C2, the other 5 vertebrae are C3 to C7.

Group 2:

Inferior to the cervical
vertebrae are the Thoracic
Vertebrae.

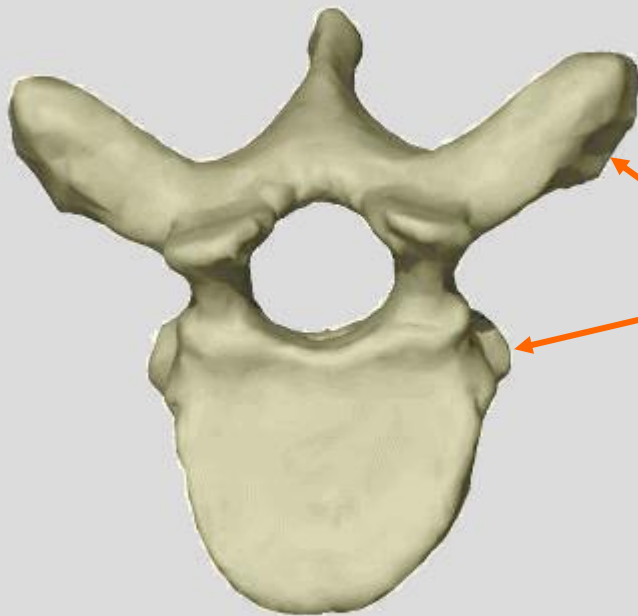
The Thoracic Vertebrae



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- There are 12 thoracic vertebrae.
- They are numbered T1 to T12.
- They have facets to connect to the ribs.

A Thoracic Vertebrae



Facets for rib attachment

Group 3:

Next, the largest of the vertebrae, the Lumbar Vertebrae.

The Lumbar Vertebrae

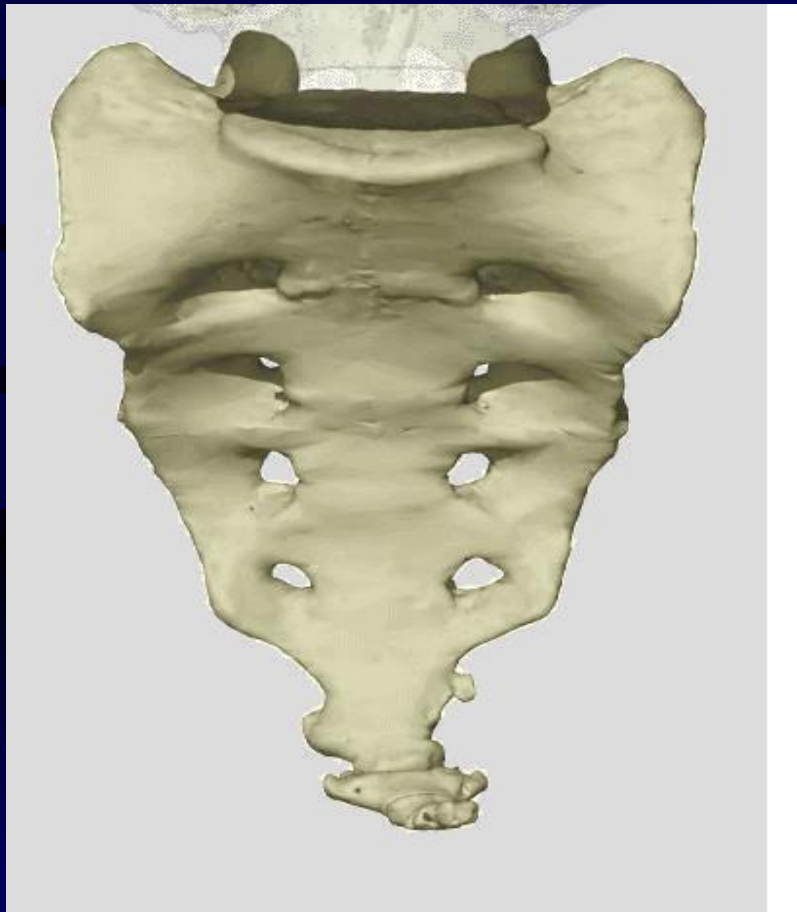
- The 5 Lumbar Vertebrae are numbered L1 to L5 and they support most of the weight of the body.



Group 4:

The 5 fused or connected
vertebrae that make up the
Sacrum

The Sacrum



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- In young children they are 5 separate bones.
- In adults they are fused into 1 single bone to attach the hips and legs.

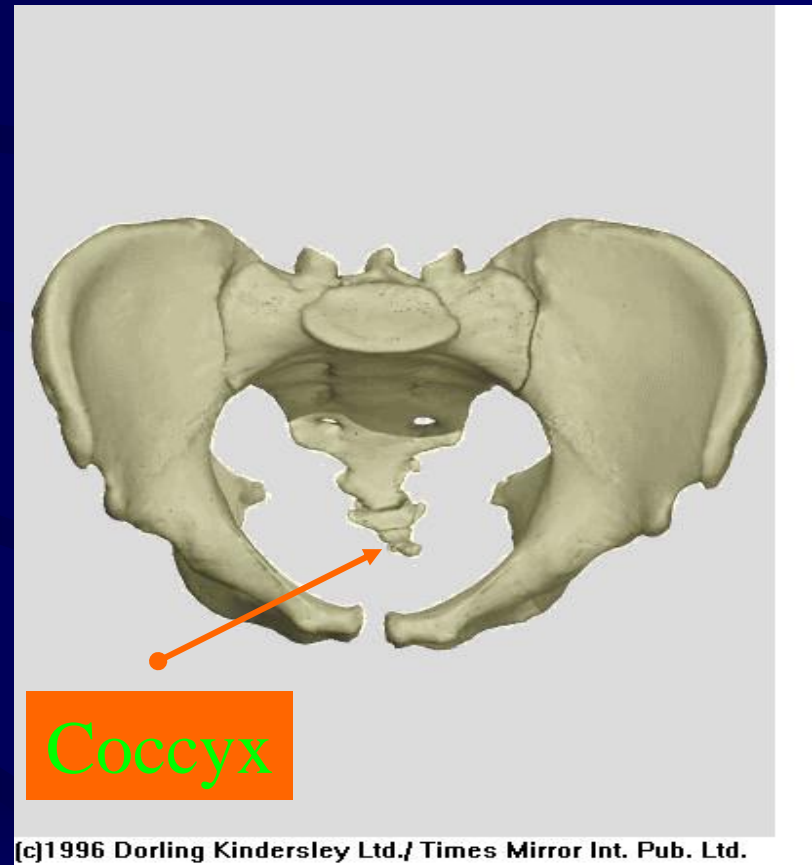
Group 5:

The final, most inferior group
of vertebrae are called the

COCCYX

The Coccyx

- The coccyx usually consists of 4 fused bones.
- They are also called the tail bone.



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The Ribs & Sternum



The chest or thorax contains the sternum, the costal cartilage, 12 pairs of ribs. Counting the thoracic vertebrae the whole unit is called the thoracic cage.

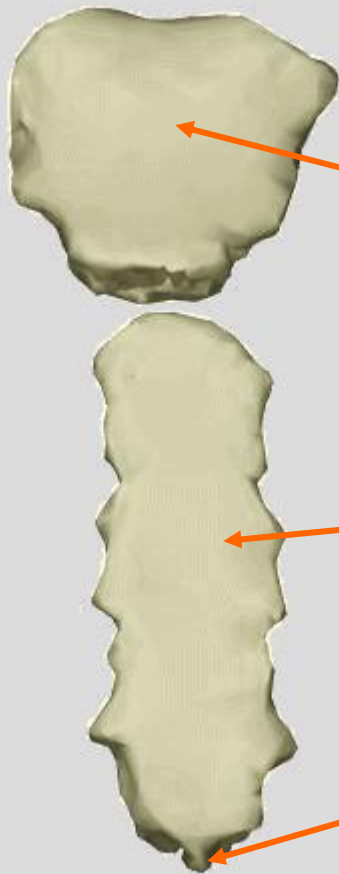
The Sternum

3 parts to the sternum

• Manubrium

• The Body

• The Xiphoid Process



The Ribs



- There are 12 pairs of ribs.
- The first 7 pairs connect to the sternum by their costal cartilage and are called true ribs.
- The rest are called false ribs.
- Pairs 11 & 12 don't connect to the sternum & are called floating ribs.