

Vertebra 1 Checklist Vertebral Column

Vertebral column	Consists of 26 bones with the following functions: <ol style="list-style-type: none">1. Supports the weight of the head and trunk.2. Protects the spinal cord.3. Allows spinal nerves to exit the spinal cord.4. Provides attachment sites for the ribs and muscles.5. Allows movements of the head and trunk.
Types and number of vertebrae	Cervical (C1 - C7) in the neck Thoracic (T1 - T12) are the sites of rib attachments Lumbar (L1 - L5) in the lower back Sacrum (S1 - S5); fuse to form a single bone; attaches to the hip bones (coxae) Coccyx (Co1 - Co4); fuse to form a single bone
Types of vertebral curves	Cervical - develops when the baby lifts its head Thoracic Lumbar - develops when the infant walks Sacral/coccygeal
Abnormal vertebral curves	Kyphosis - exaggerated thoracic curve; can be caused by osteoporosis Lordosis - exaggerated lumbar curve; can be caused by pregnancy or potbelly Scoliosis - abnormal lateral curve

Vertebra 2 Checklist

Parts of Vertebra

Body of vertebra	Thick, cylindrical part of the vertebra responsible for bearing weight.
Intervertebral disk	<p>An intervertebral disk is a fibrocartilage pad located between the bodies of the vertebrae. The intervertebral disks:</p> <ol style="list-style-type: none">1. Help to hold the vertebrae together.2. Protect the vertebral bodies because they prevent the bone of adjacent vertebral bodies from rubbing against each other.3. Allow the vertebral bodies to move slightly relative to each other. The combined movement between many vertebral bodies results in bending of the vertebral column.
Annulus fibrosus	The outer, tough part of an intervertebral disk.
Nucleus pulposus	The softer, central part of an intervertebral disk.
Herniated disk	Rupture of the annulus fibrosus and extrusion of the nucleus pulposus.
Spinous process	<p>Midline, posterior projection of the vertebrae that is a site of ligament and muscle attachment.</p> <ol style="list-style-type: none">1. Muscles pulling on the spinous processes can move the vertebral column.2. The spinous processes can be anchor points for muscles moving the head, shoulder blades (scapulae), and arms.
Transverse process	Laterally projecting process that is a site of ligament and muscle attachment; muscles pulling on the transverse processes can move the vertebral column.
Vertebral arch	A bony projection that protects the spinal cord and cauda equina by covering them laterally and posteriorly.
Pedicle	Constricted, anterior part of the vertebral arch.
Lamina	Flattened, posterior part of the vertebral arch.

Vertebra 2 Checklist
Parts of Vertebra

Vertebral foramen	Hole formed by the vertebral body and arch; contains the spinal cord or cauda equina.
Vertebral canal	The combined space formed by all the vertebral foramina.
Intervertebral foramen	A lateral opening in the vertebral column through which a spinal nerve passes.
Superior and inferior intervertebral notches	Intervertebral notches are indentations in the pedicles of two adjacent vertebrae that combine to form an intervertebral foramen.
Articular facet for tubercle of rib	Smooth surface where the tubercle of a rib attaches to a transverse process; holds the rib while allowing it to move during respiration.
Articular facet for rib head	Smooth surface where the head of a rib attaches to a vertebral body; holds the rib while allowing it to move during respiration.
Superior and inferior articular processes	Projections that connect two adjacent vertebrae to each other; holds the vertebrae together while allowing them to move when the vertebral column bends or straightens.

Vertebra 3 Checklist

Types of Vertebra

Atlas	First cervical vertebra Joins with the occipital condyles Allows lateral skull movement (side-to-side “tilt”) Allows anterior/posterior movement (“yes” movement) No spinous process or body
Axis	Second cervical vertebra The dens is a projection around which the atlas rotates. Results in a “no” movement of the skull.
Transverse foramen	An opening in the transverse process through which a blood vessel (vertebral artery) supplying blood to the brain passes. ALL cervical vertebrae have two transverse foramina.
Thoracic vertebra	Articular facets where the head of the rib attaches to the vertebral body. Articular facets where the tubercle of the rib attaches to the transverse process. Tend to have slender, long, downward pointing spinous processes. Looks like a giraffe head.
Lumbar vertebra	Tend to have larger vertebral bodies and short, blunt spinous processes. Looks like a moose head.
Sacrum	A single bone formed by the fusion of five sacral vertebrae.
Ala	Fused transverse processes that connect the sacrum to the hip bones.
Sacral promontory	The anterior, superior edge of sacrum, which marks the boundary between the abdominal and pelvic cavities. Used to help determine the size of the birth canal.
Sacral canal	The continuation of the vertebral canal into the sacrum. Contains the cauda equina.
Sacral foramen	Opening through which spinal nerves exit the sacrum.
Sacral hiatus	The inferior opening of the sacral canal. Can be entered to inject an anesthetic.
Coccyx (tail bone)	Single bone formed by the fusion of four coccygeal vertebrae. It is connected to the sacrum by ligaments and functions as an attachment site for muscles.