

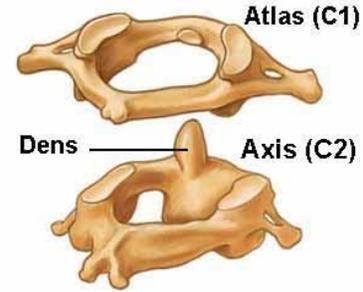
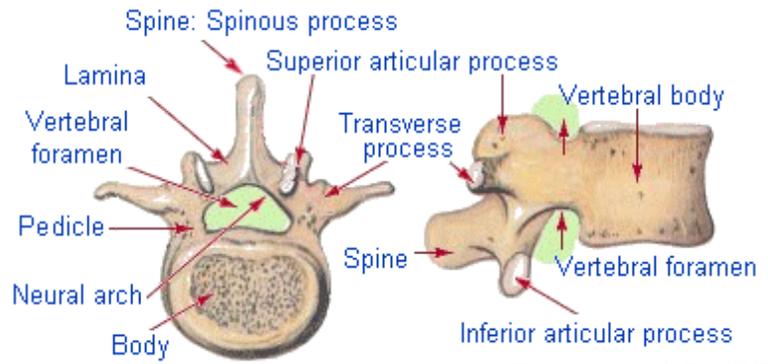
VERTEBRAL COLUMN, THORAX

revised 22 September 2016

Skeletal System: Axial II, S&M p138, Martini 6th: 228-239, 7th: 224-234, 8th: 231-242, 9th: 217-228, 10th: 226-237

General characteristics of vertebra: (p 219) LEARN:

centrum (body)	lamina
neural (vertebral) arch	superior & inferior articular process and facets
vertebral foramen	transverse process
pedicle	vertebral notches (form intervertebral foramina for spinal nerves)
spinous process	

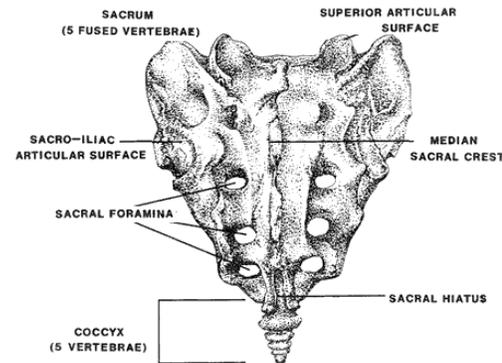


VERTEBRAL COLUMN (table on p 227, diagrams on 228 - 234)

LEARN:	7 cervical	neck bones, delicate, have transverse foramina and bifurcated spinous processes
	12 thoracic	have demifacets: articular surfaces for ribs, centra (all) and transverse costal facet on transverse processes (except 11th & 12th)
	5 lumbar	heavy centra, short blunt spinous processes,
	5 sacral	fused
	4 coccygeal	fused
C ₁ p. 221	atlas	articular surface for dens, transverse ligament, allows "yes" nod
C ₂	axis	possesses dens, allows shaking head "no."
C ₇	vertebra prominens	good landmark at base of neck.

Sacrum, formed by five fused vertebra at puberty (p 224)

features:	Ala [wing]	superior anterior medial surface
	auricular surface [ear small]	for articulation of os coxa
	hiatus [gap, yawn]	hole at inferior end
	sacral promontory	at superior point ventral
	median sacral crest	continuation of spine



Coccyx [cuckoo] tail bone, three to five vertebrae, begin fusing by age 26, may totally fuse in the aged. **cornua** formed by lamina of first coccygeal vertebra

Thorax: [chest] sternum, ribs, costal cartilage. (P 236)

Ribs: 12 pairs: LEARN:

7 pairs of vertebrosternal (true)	possess own direct cartilage to sternum
3 pairs of vertebrochondral (false)	share a cartilage connection to sternum
2 pair of vertebral (floating)	are not connected to sternum

rib features: (237)

head of rib	articulates with two demifacets of adjacent vertebrae except 1, 10, 11 and 12 which rest on single vert facet
tubercle	articulates with transverse process of thoracic vertebrae.
costal cartilage	hyaline cartilage, anchor ribs, provide flexibility

Sternum (breast) P 236

manubrium (handle)	articulates: medial end of clavicle and 1st and 2nd costal cart.
gladiolus (sword)	articulates with costal cartilages: 2nd thru 7th
xiphoid (sword)	attachment via ligament to muscle (rectus abdominis) and linea alba (midline of abdomen)

