

Anatomy and Physiology

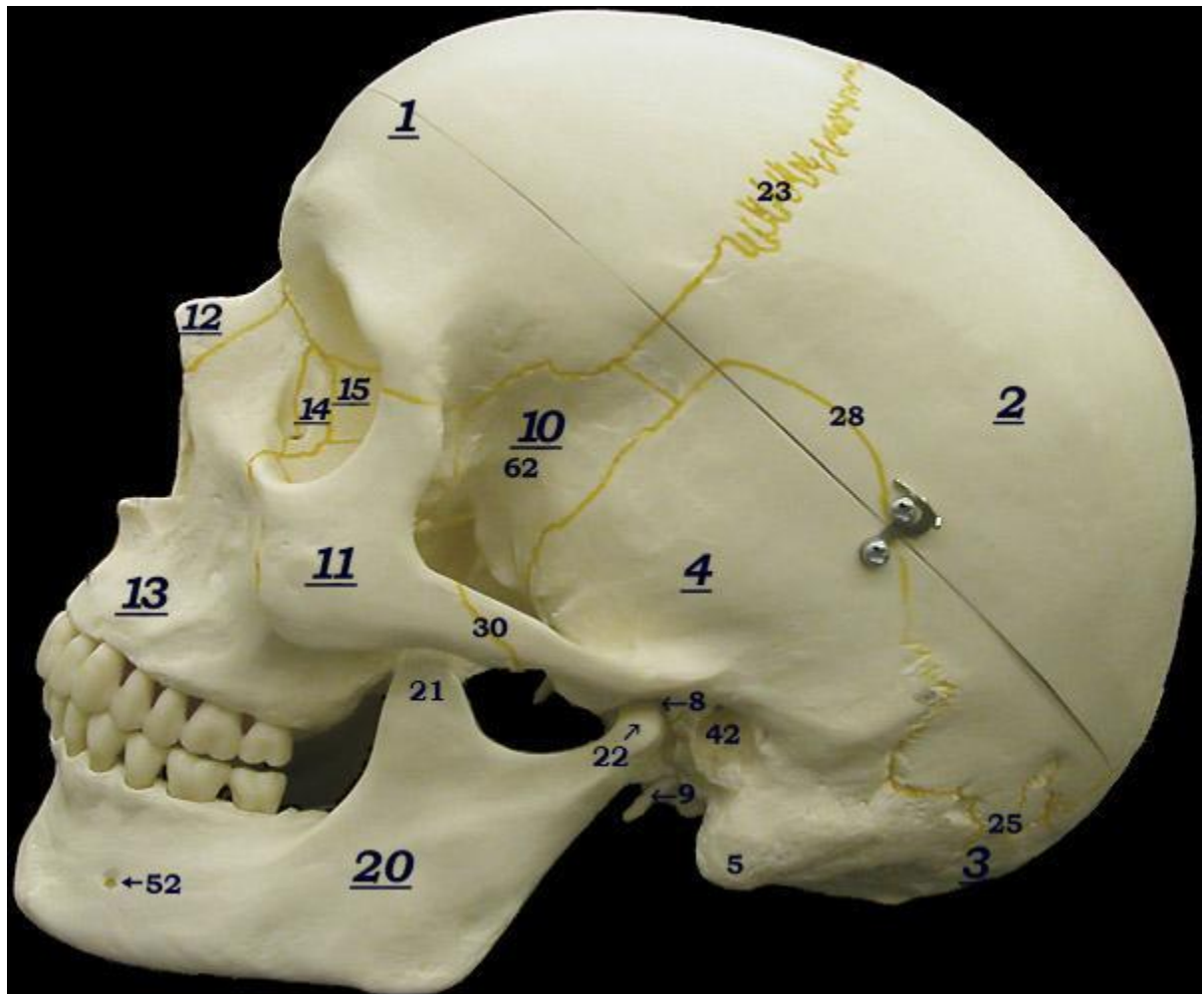
Laboratory 6a. Axial and appendicular skeleton

Based on mini-atlas of bones (pages 2-16) and information from the Internet find on the human model and identify bones marked with numbers given by your laboratory instructor. Describe their type, functions and structure based on the table below:

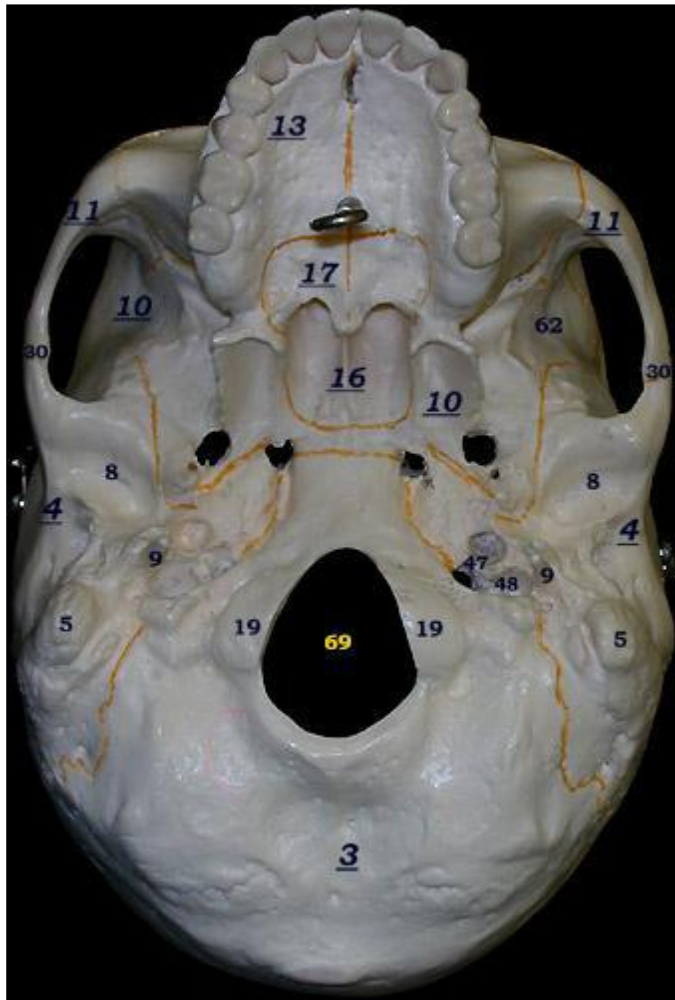
| | |
|--------------------------------------|---|
| Bone name | Ankle bone |
| Latin name | <i>talus, astragalus</i> |
| Bone type | Short bone |
| Skeleton (axial/appendicular) | Appendicular skeleton, foot bone |
| Bone elements | <ul style="list-style-type: none">- body (corpus tali)- neck (collum tali)- head (caput tali) |
| Description | Ankle bone is one of the group of foot bones known as the tarsus. The tarsus forms the lower part of the ankle joint through its articulations with the lateral and medial malleoli of tibia and fibula. Within the tarsus, it articulates with the calcaneus below and navicular in front within the talocalcaneonavicular joint. Through these articulations, it transmits the entire weight of the body to the foot. |

I. Axial skeleton

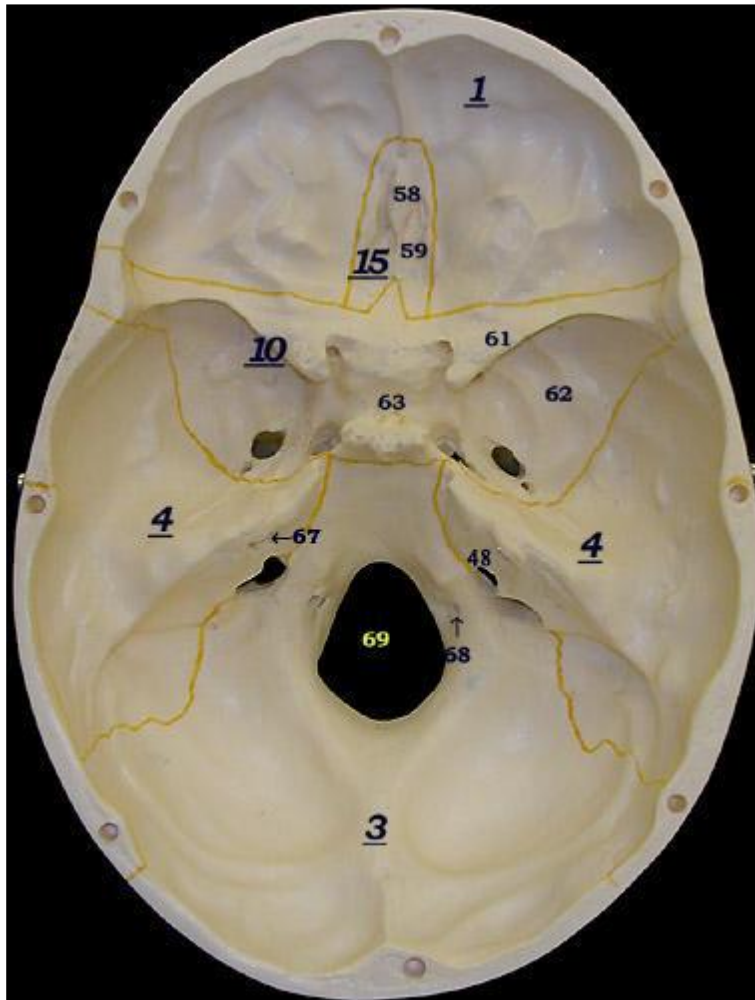
1. Skull



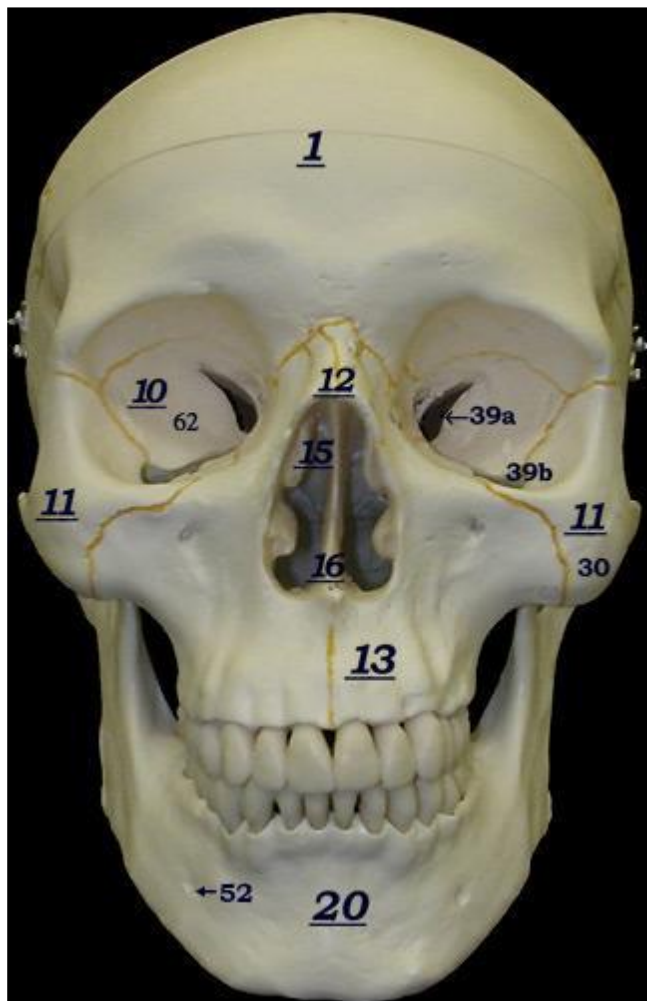
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|---------------------|--------------------|--------------------------------|
| 1. frontal bone | 10. sphenoid bone | 21. coronoid process |
| 2. parietal bone | 11. zygomatic bone | 22. mandibular condyle |
| 3. occipital bone | 12. nasal bone | 23. coronal suture |
| 4. temporal bone | 13. maxilla | 25. lambdoid suture |
| 5. mastoid process | 14. lacrimal bone | 28. squamous suture |
| 8. mandibular fossa | 15. ethmoid bone | 42. external auditory meatus |
| 9. styloid process | 20. mandible | 52. mental foramen |
| | | 62. greater wing (of sphenoid) |



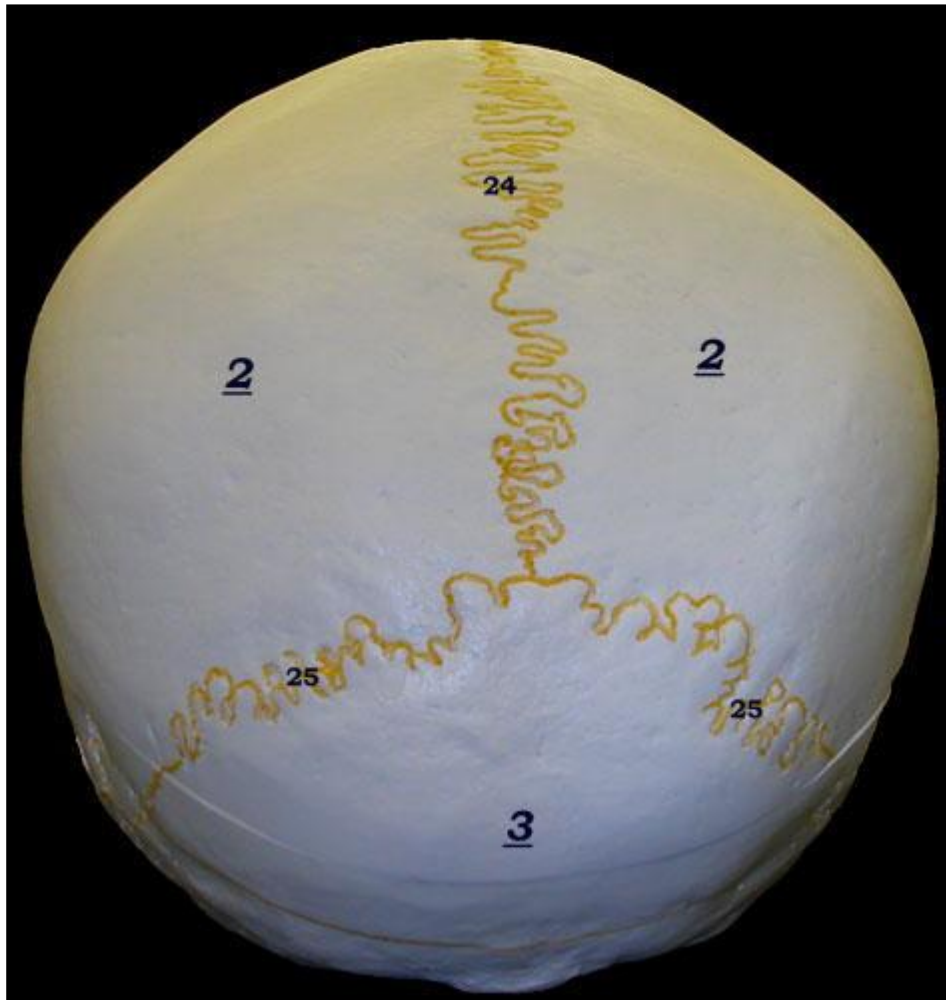
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| 3. occipital bone | 10. sphenoid bone | 19. occipital condyles |
| 4. temporal bone | 11. zygomatic bone | 30. zygomatic arch |
| 5. mastoid process | 13. maxilla | 47. carotid canal |
| 8. manibular fossa | 16. vomer | 48. jugular foramen |
| 9. styloid process | 17. palatine bone | 62. greater wing |



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|-------------------|----------------------|------------------------------|
| 1. frontal bone | 48. jugular foramen | 63. sella turcica |
| 3. occipital bone | 58. crista galli | 67. internal auditory meatus |
| 4. temporal bone | 59. cribriform plate | 68. hypoglossal canal |
| 10. sphenoid bone | 61. lesser wing | 69. foramen magnum |
| 15. ethmoid bone | 62. greater wing | |

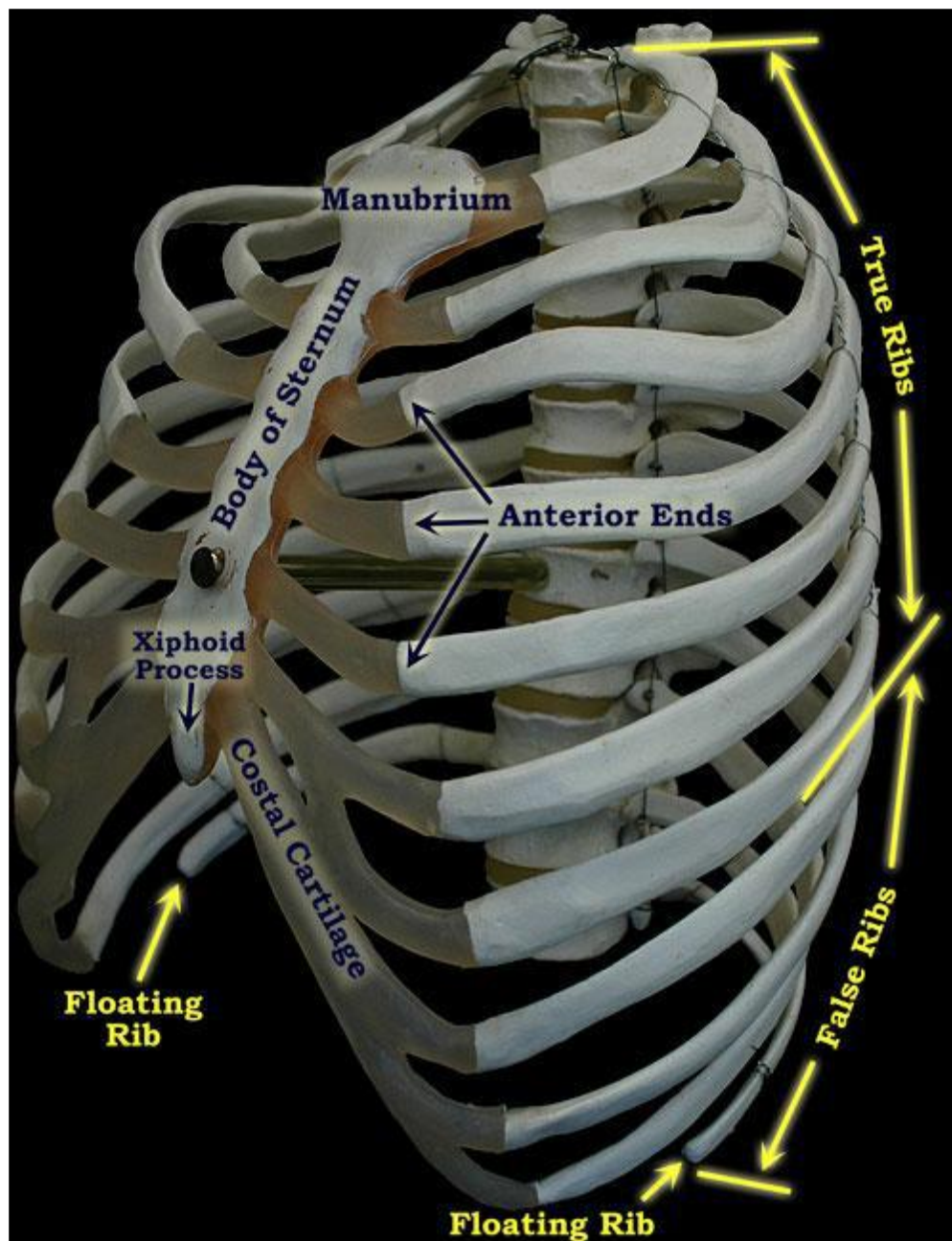


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|--------------------|-------------------------------|-------------------------------|
| 1. frontal bone | 15. ethmoid bone | 39b. inferior orbital fissure |
| 10. sphenoid bone | 16. vomer | 52. mental foramen |
| 11. zygomatic bone | 20. mandible | 62. greater wing |
| 12. nasal bone | 30. zygomatic arch | |
| 13. maxilla | 39a. superior orbital fissure | |

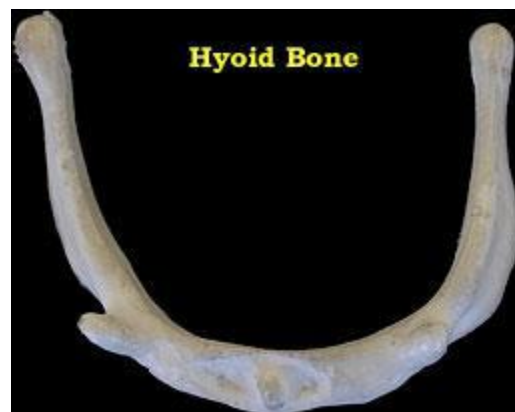


- 2. parietal bone
- 3. occipital bone
- 24. sagittal suture
- 25. lambdoid suture

2. Rib cage



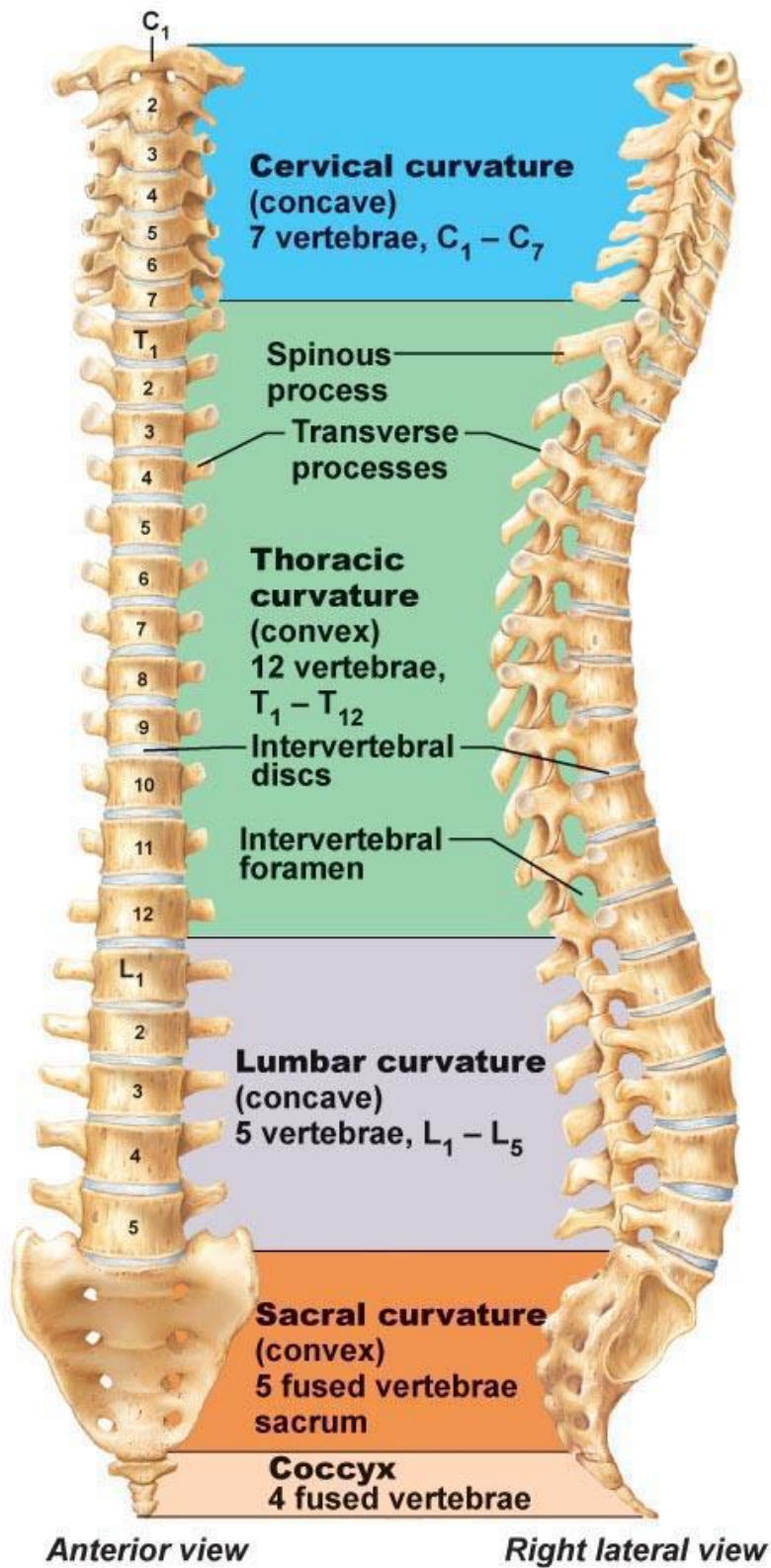
Sternum



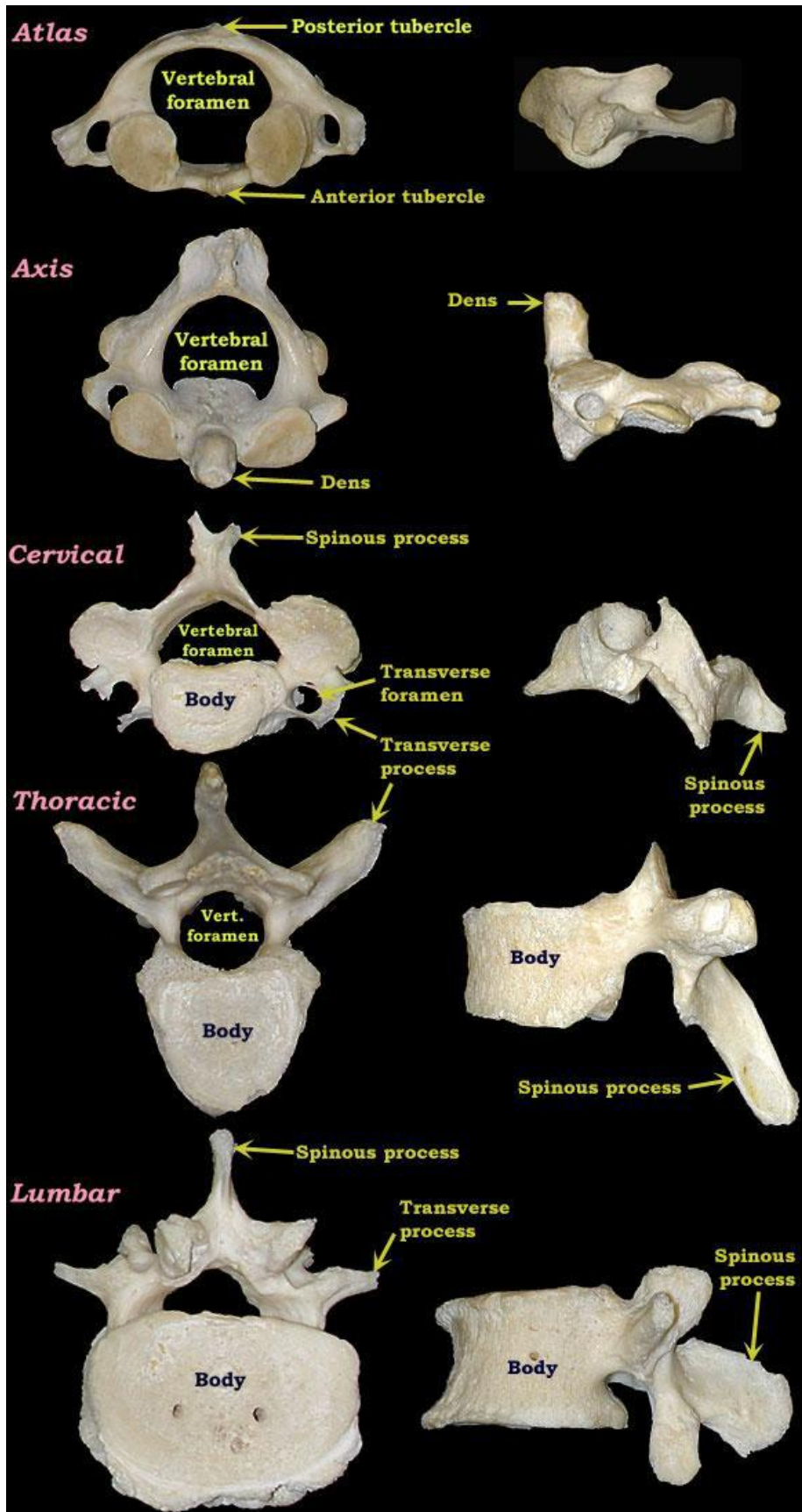
Ribs



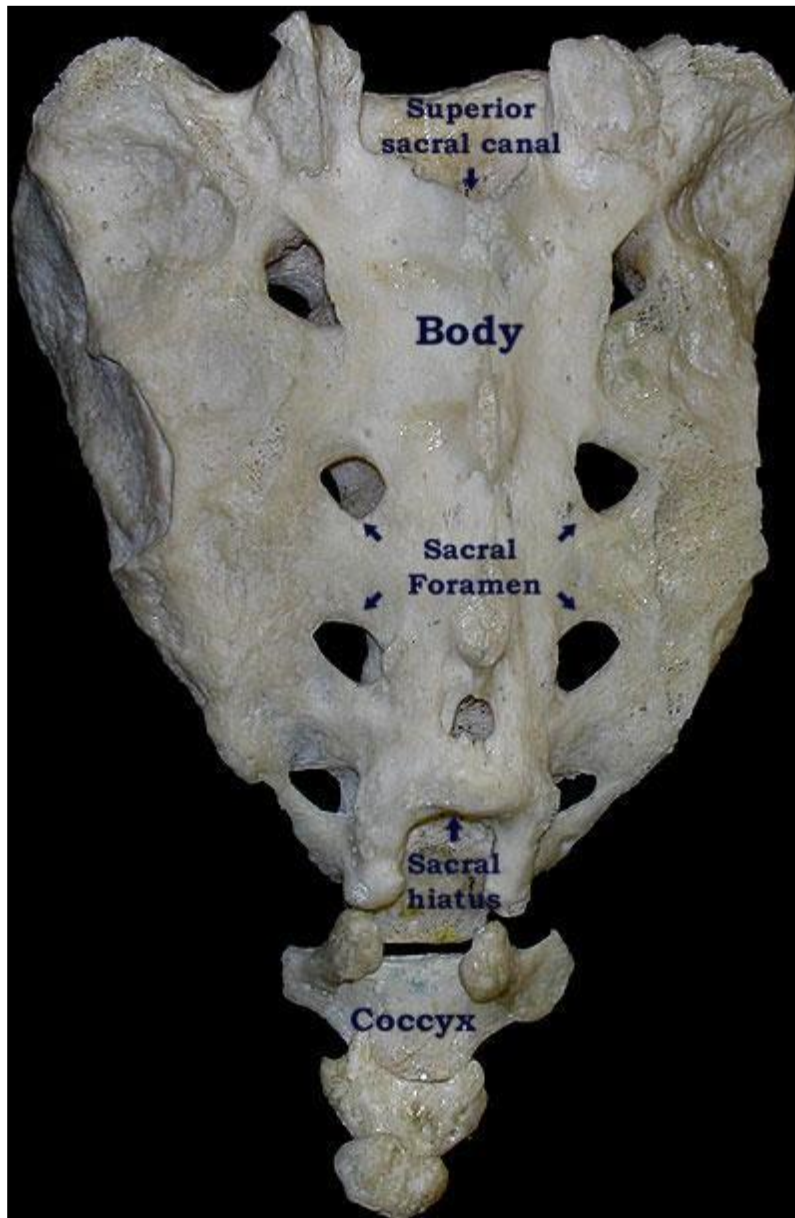
3. Vertebrae



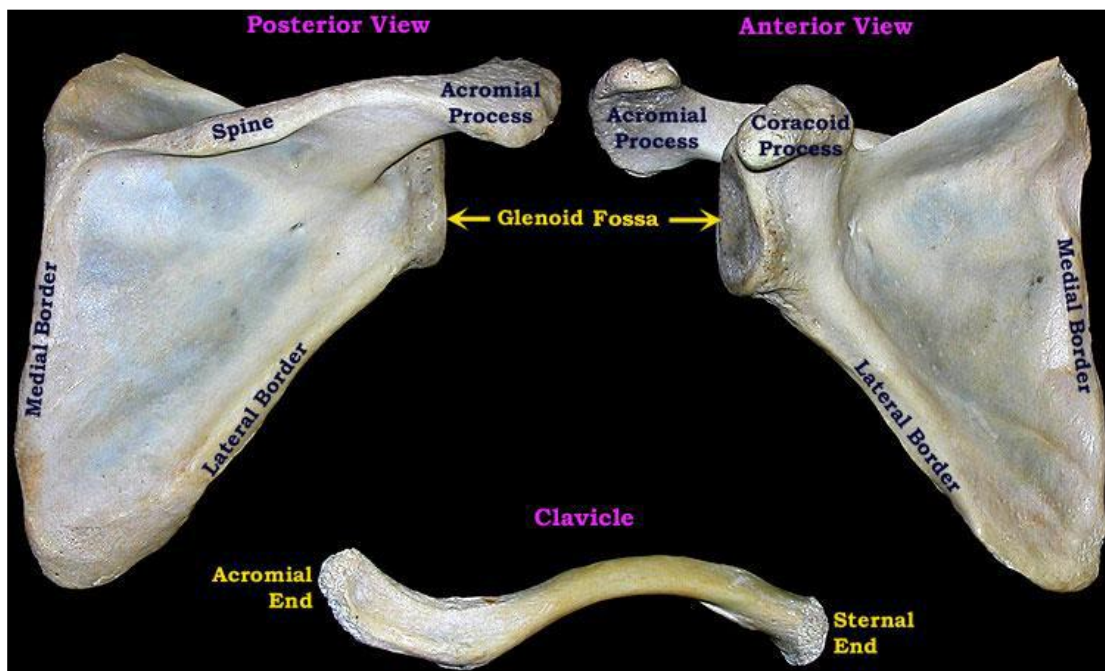
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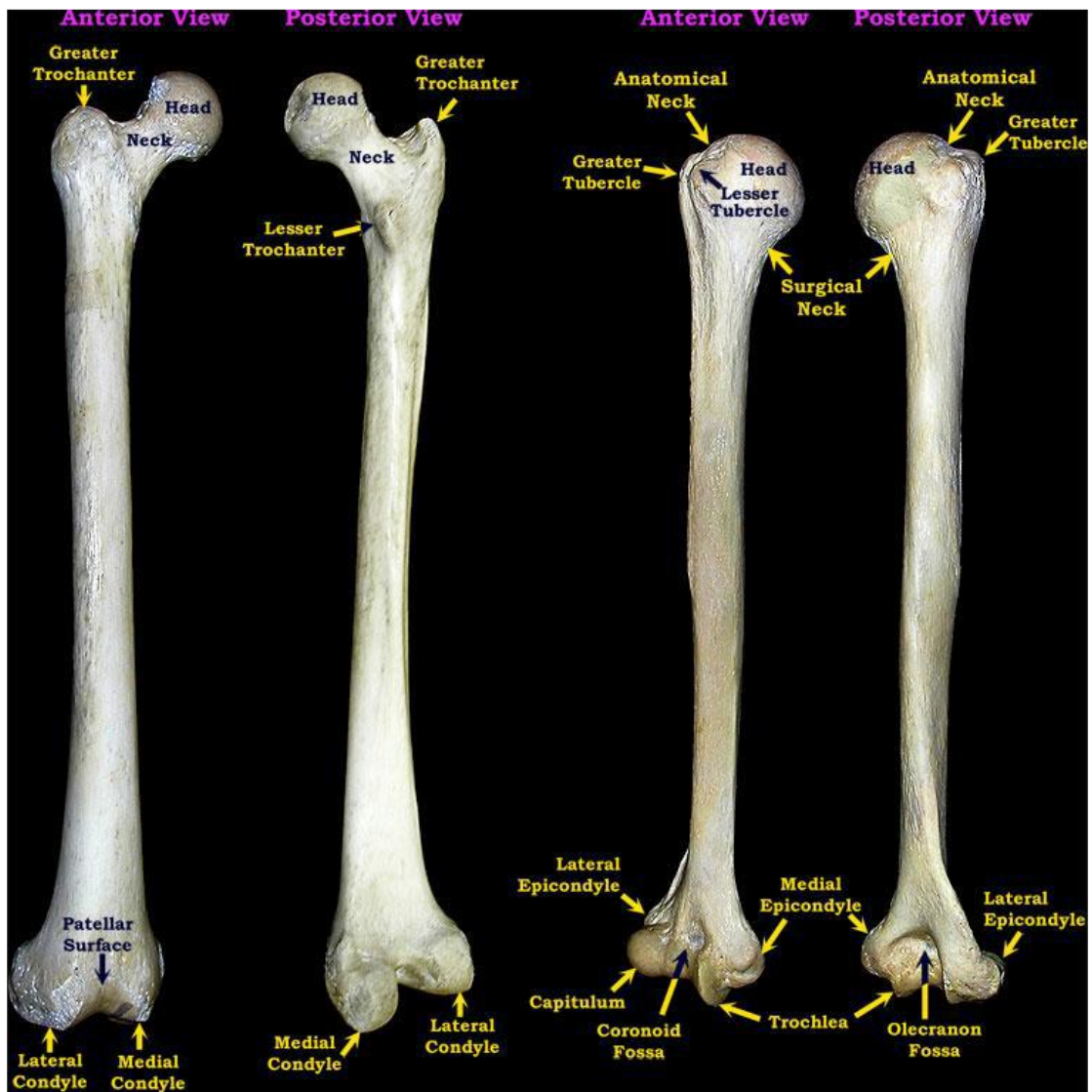
4. Sacrum and coccyx



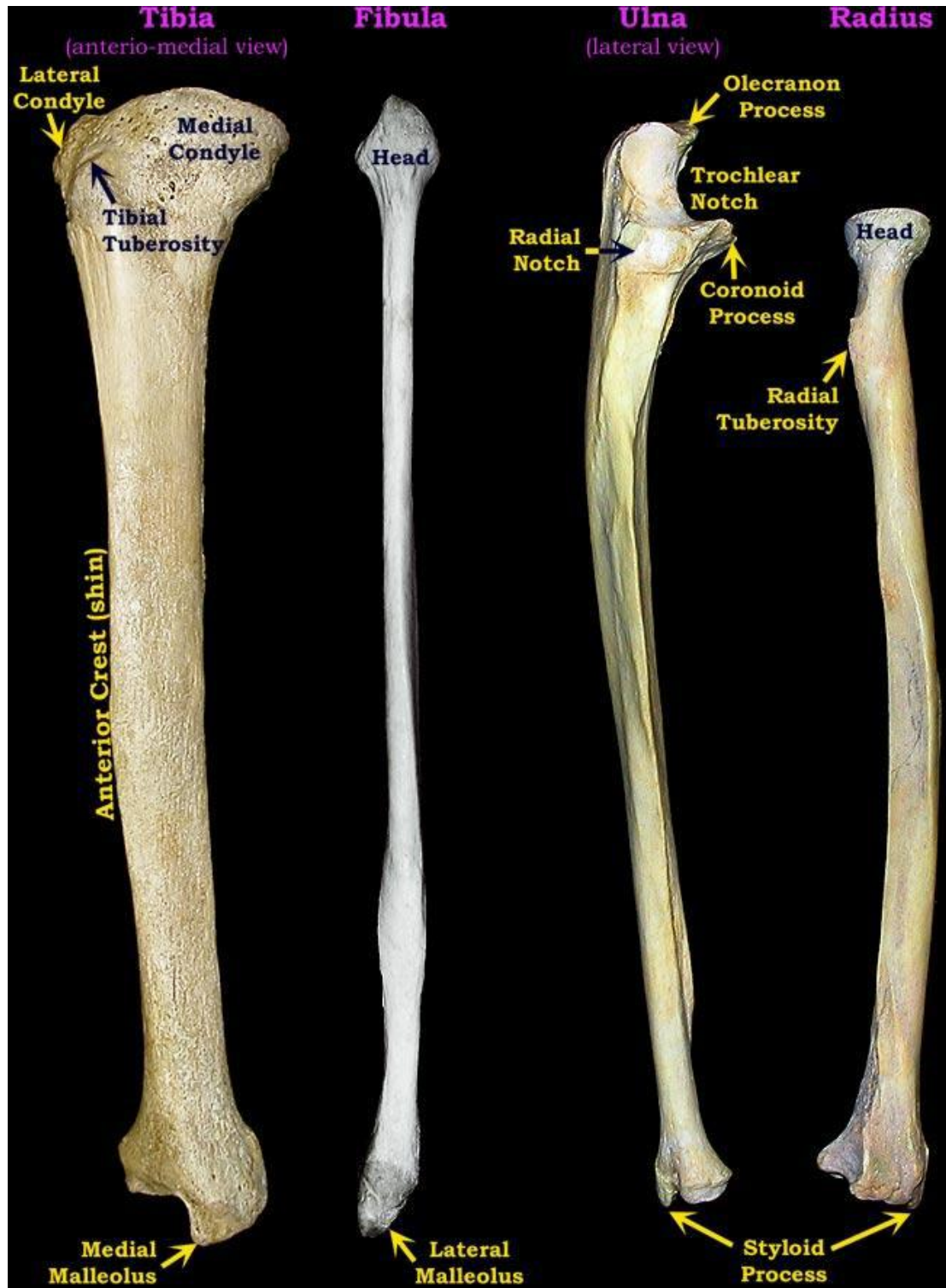
II. Appendicular skeleton



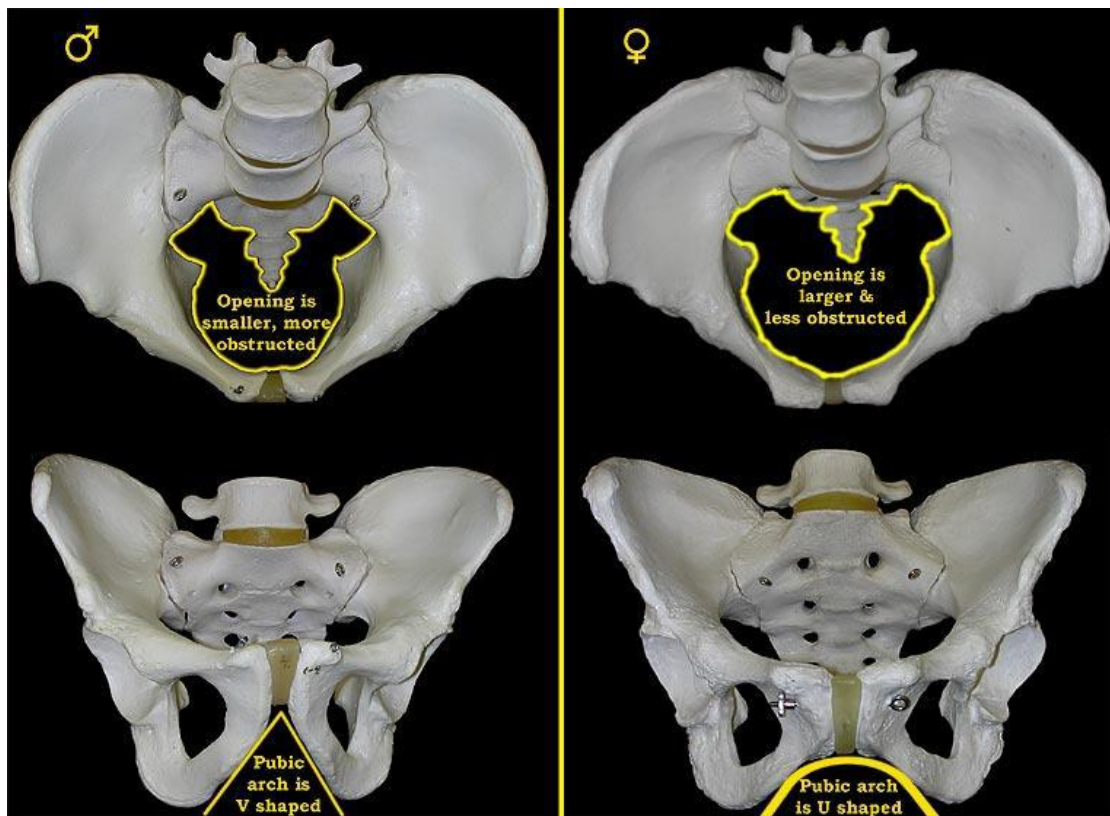
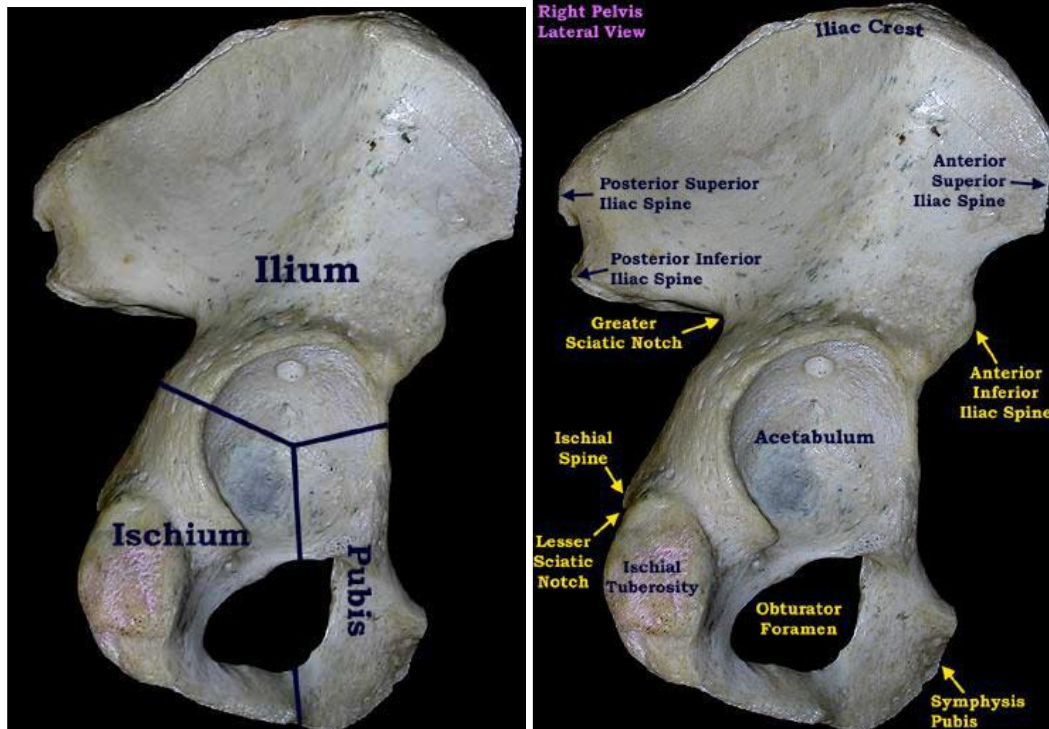
1. Proximal limbs



2. Distal limbs



3. Pelvis



4. Hands and Feet

