

Bio 135 Lab: Bones lab one. Axial Skeleton:

- Objectives:
 - Learn the surface marking terminology
 - Apply this terminology to bony structures
 - Identify the bones of the axial skeleton and the related surface markings

- Pre-Lab activities:
 - Go to virtual lab and review materials on the Skeletal system.
 - Review the Axial bones study list at the end of this document. Learn these bones and markings by visually comparing them to images in your text and online.

- Related in lab activities:
 - Brief lecture on bones of the Axial Skeleton
 - Review slide of microscopic structure of bone and identify structures
 - Exercise
 - View the bones in class that are listed below. Learn to visually identify these bones. And related structures, on the virtual lab and the images in your text.
 - Be able to identify the structures of the skull as listed.

Bio 135

Bones and Markings of the Axial Skeleton

The Skull

1. **Frontal bone**
2. **Parietal bone**
3. **Occipital bone**
 19. occipital condyles
 69. foramen magnum
4. **Temporal bone**
 5. mastoid process
 8. mandibular fossa
 9. styloid process
 30. zygomatic arch
 42. external auditory meatus
11. **Zygomatic bone**
12. **Nasal bone**
13. **Maxilla**
14. **Lacrimal bone**
15. **Ethmoid bone**
 58. crista galli
 59. cribriform plate
16. **Vomer**
17. **Palatine bone**
10. **Sphenoid bone**
 63. sella turcica
20. **Mandible**
 52. mental foramen
 21. coronoid process
 22. mandibular condyle

The Hyoid Bone

The Vertebral Column

Cervical vertebrae (7)

- body
- spinous process
- transverse process
- transverse foramen
- vertebral foramen

Atlas

Axis

- dens

Thoracic vertebrae (12)

- body
- spinous process
- transverse process
- vertebral foramen

Lumbar vertebrae (5)

- body
- spinous process
- transverse process
- vertebral foramen

Sacrum

- body
- sacral hiatus
- superior sacral canal
- sacral foramina

Coccyx

The Thoracic Cage

Sternum

- body
- manubrium
- clavicular notch
- jugular notch
- xiphoid process

Ribs

- true ribs** (7 pairs)
- false ribs** (5 pairs)
- floating ribs** (2 pairs)