

BIOLOGY 306 COMPARATIVE VERTEBRATE ANATOMY

LAB #6

Skeletal Systems: Mammals

Quiz - Canid Skull

I. SKELETAL SYSTEM: Class Mammalia

A. Cat: Skull and postcranial skeleton.

Mammalian skull bones will be learned on the coyote skull. However, also learn the names of the bones on the exploded view of a cat skull, especially the ethmoid bone.

For the limb bones, learn the individual bones proximal to the carpals and tarsals, including the bones associated with the girdles. In addition to the actual names of the bones, differentiate left from right.

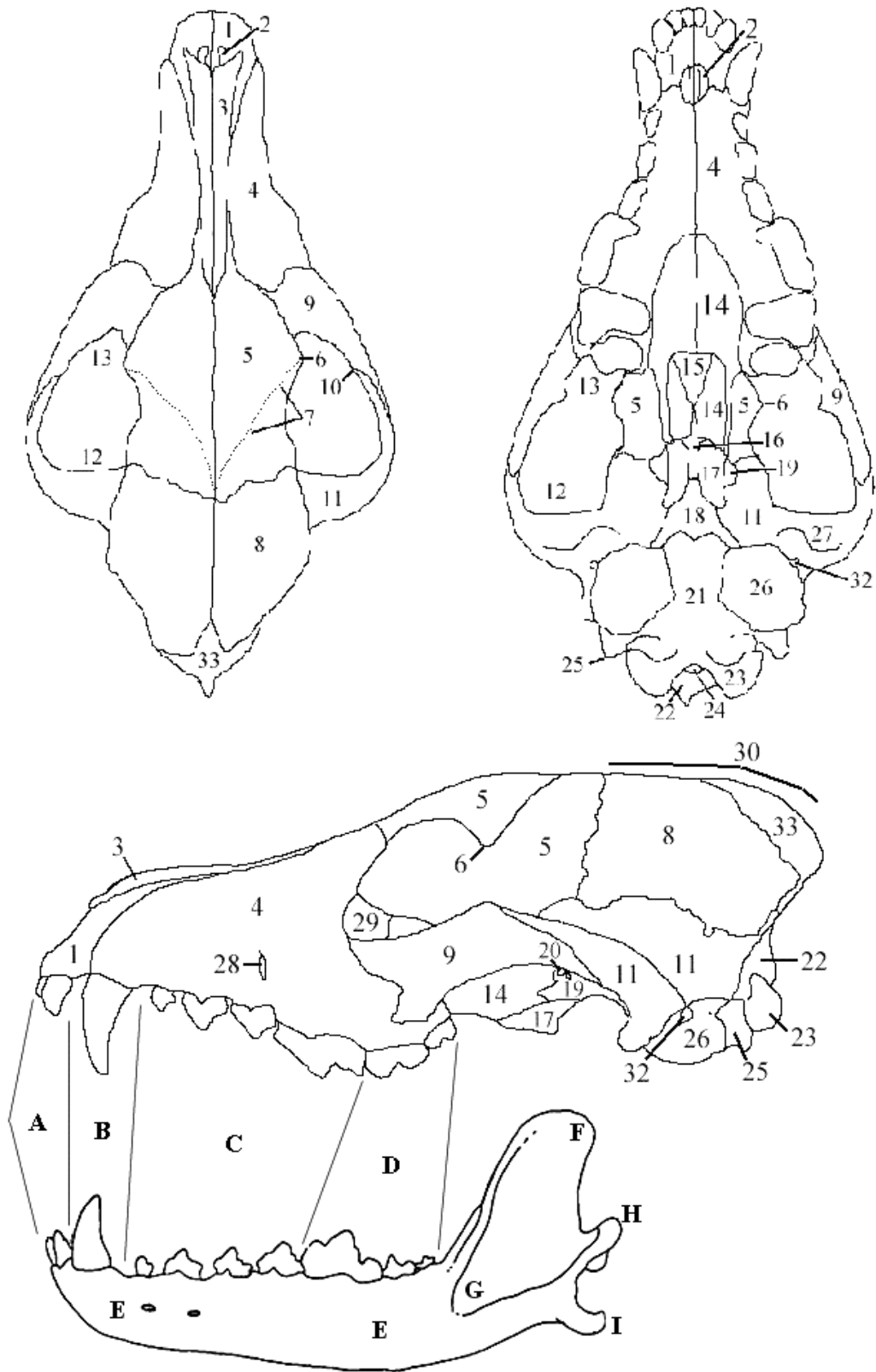
For the vertebral column, know the atlas and axis, and be able to differentiate cervical, thoracic, lumbar, and caudal vertebral elements, as well as the sacrum.

B. CANID SKULL – learn all labels. Also note canid atlas and axis.

LAB PRACTICAL #2

Approximate number of questions from each specimen type.

Lab 4	Lab 5	Lab 6
2 – Shark	2 – Necturus	7 - Canid Skull
4 - Gar Skull	5 - Turtle Skull & Skeleton	7 - Cat Skeleton
4 - Bowfin Skull	4 - Alligator Skull	
5 - Fish Skull & Skeleton	3 - Emu Skull	
3 – Frog	4 - Bird Skeleton	



Drawings by Ryan Rehmeier and Ray Matlack, except for mandible (modified from Glass, B.P., and M.L. Thies. 1997. A key to the skulls of North American mammals, 3rd ed.).

## KEY TO BONES, REGIONS, AND STRUCTURES OF THE COYOTE SKULL

- |                                |                                    |
|--------------------------------|------------------------------------|
| 1. premaxilla                  | 24. foramen magnum                 |
| 2. palatal foramen             | 25. paroccipital process           |
| 3. nasal                       | 26. auditory bulla (tympanic bone) |
| 4. maxilla                     | 27. mandibular fossa               |
| 5. frontal                     | 28. infraorbital foramen           |
| 6. postorbital process         | 29. lacrimal bone                  |
| 7. temporal ridge              | 30. sagittal crest                 |
| 8. parietal                    | 31. orbitosphenoid                 |
| 9. jugal                       | 32. external auditory meatus       |
| 10. zygomatic process of jugal | 33. interparietal                  |
| 11. squamosal                  |                                    |
| 12. temporal fossa             | <u>Teeth</u>                       |
| 13. orbit                      | A. incisor                         |
| 14. palatine                   | B. canine                          |
| 15. vomer                      | C. premolar                        |
| 16. presphenoid                | D. molar                           |
| 17. pterygoid                  |                                    |
| 18. basisphenoid               | <u>Dentary</u>                     |
| 19. alisphenoid                | E. ramus                           |
| 20. alisphenoid canal          | F. coronoid process                |
| 21. basioccipital              | G. masseteric fossa                |
| 22. occipital                  | H. mandibular condyle              |
| 23. occipital condyle          | I. angular process                 |