**Sample Lab Objectives Comparative Vertebrate Anatomy**

**Chapter 3**

2 points 1. Classify Amphioxus (=Branchiostoma) in the appropriate phylum and subphylum.

**Chapter 14**

2 points 1. Classify lampreys in the appropriate phylum and subphylum.

2 points 2. What is the difference between the terms myotome and myomere?

**Identify, Label, and Color the following structures on a bony fish skeleton (Chapter xx) using the fish illustration provided:**

29 points possible. 1 point for correct identification of each structure. 1 point for coloring all portions of each structure. 4 points for 2 pairs of directional terms not already listed in the illustration. 1 point for overall neatness of submission.

1) Operculum, 2) Maxilla, 3) Rib, 4) Caudal fin, 5) Pectoral fin, 6)Pelvic fin, 7)Orbit, 8)Neural spine = Spinous process, 9) Hemal spine,10) Anal fin, 11) Dentary, 12)Caudal vertebrae.

**Identify, Label, and Color the following structures on a human skeleton (Chapter xx) using the human anatomy illustrations provided:**

51 points possible. 1 point for correct identification of each structure. 1 point for coloring all portions of each structure. 2 points per picture for a total of 6 points, for two pairs of directional terms not already listed in the illustration. 1 point per picture for overall neatness of submission.

Pectoral Girdle and Appendage:1)Clavicle: 2)Sternal end, 3)Acromial end. 4)Humerus: 5 & 6) Medial and lateral epicondyles, 7) Olecranon fossa. 8)Radius: 9) Neck, 10) Head. 11) Ulna: 12) Olecranon process.

Pelvic Girdle and Appendage: 13)Foot: 14)Navicular, 15) Cuboid, 16) Talus, 17) Calcaneus, 18) Phalanges (19-21 Distal, Middle and Proximal).

**Identify, Label, and Color the following structures on a human muscle picture (Chapter xx) using the human anatomy illustrations provided:**

12 points possible. 1 point for correct identification of each structure. 1 point for coloring all portions of each structure. 1 point for 1 pair of directional terms not already listed in the illustration. 1 point per picture for overall neatness of submission.

Head and Neck Muscles: Digastric, 2) Sternocleidomastoid 3) Mylohyoid, 4) Sternohyoid, 5) Sternothyroid.

**Identify, Label, and Color the following structures on a human blood vessel picture (Chapter xx) using the human anatomy illustrations provided:**

12 points possible. 1 point for correct identification of each structure. 1 point for coloring all portions of each structure. 1 point for 1 pair of directional terms not already listed in the illustration. 1 point per picture for overall neatness of submission.

Brain Arteries: 1)Internal carotid artery, 2) Basilar artery, 3) Posterior cerebral artery, 4) Vertebral artery, 5) Middle cerebral artery.

[Use this illustration for Fish](http://sites.msudenver.edu/haysc/wp-content/uploads/sites/150/2022/03/Unlabeled-sample-lab-bony-fish.jpeg)

[Use this illustration for Human](http://sites.msudenver.edu/haysc/wp-content/uploads/sites/150/2022/10/Sample-Comparative-Blank-Coloring.pdf)