Lab 8: Introduction to Human Osteology

1. Take the Skeleton Quiz and answer the following two questions: What was your score on the quiz? Which, if any bones, did you identify incorrectly?

My highest score on the quiz was 100 percent. I initially did not identify the Ulna, Radius, and Humerus correctly.

1. Vertebral Column: Name the three main types of vertebrae in the human skeleton and indicate how many of each type there are. Briefly describe the location of the sacrum on the skeleton.

There are three main types of vertebrae in the human skeleton: Cervical vertebrae, Thoracic vertebrae, and Lumbar vertebrae. There are seven cervical vertebrae, twelve thoracic vertebrae, and five thoracic vertebrae. The sacrum is composed of five fused vertebrae. It is at the sacroiliac joint and forms the pelvic girdle alongside two pelvic (innominate) bones. It is fused with other coccygeal vertebrae at the inferior end of the vertebral column. It is distal to the pubic bone.

1. Sternum: Briefly describe its location on the skeleton.

The Sternum is in the thorax (chest area). It is the breastbone connecting the ribs in the anterior of the skeleton. It is medial and ventral. It is composed of the manubrium, body, and xiphoid process.

1. Clavicle: Name the two bones that articulate/connect with the clavicle.

The sternum and the scapula.

1. Scapula: Name the feature on this bone that articulates/connects with the head of the humerus.

The acromion process.

1. Humerus: Name the three bones that articulate/connect with the humerus.

The scapula, radius, and ulna.

1. Radius and Ulna: Indicate where these bones are located on the skeleton.

The radius and ulna are the bones in the forearm. They are distal and inferior to the humerus.

1. Hand and Foot: Name the three main types of bones that make up the hand and wrist. Name the three main types of bones that make up the foot.

The three main types of bones in the hand and wrist are the carpal bones, metacarpals, and phalanges. The three main types of bones in the foot are the tarsal bones.

1. Pelvis: Provide the name for the bones that the sacrum sits between (there are two)

The bones that the sacrum sits between are the pelvic (innominate) bones.

1. Femur: Describe its location on the skeleton and its most distinctive characteristic.

The femur is proximal to the hip bone and superior to the fibula and tibia. Its most distinctive characteristic is that from the hip to the knee, it angles inward, bringing the weight-bearing load more to our center of gravity.

1. Patella: Name the two bones that are adjacent to it.

The bones adjacent to the patella are the fibula and tibia.

1. Fibula and Tibia: Indicate where these bones are located on the skeleton.

The fibula and tibia are adjacent to the patella and inferior to the femur. The fibula is distal to the tibia and both inferior to the femur.

1. Skull: Name the “upper jaw” and “lower jaw” bones. Briefly describe the location of the zygomatic arch (aka “zygoma”) on the cranium.

The upper jaw bone is called the maxilla and the lower jaw bone is called the mandible. The zygomatic arch is the anterior portion of the maxilla.