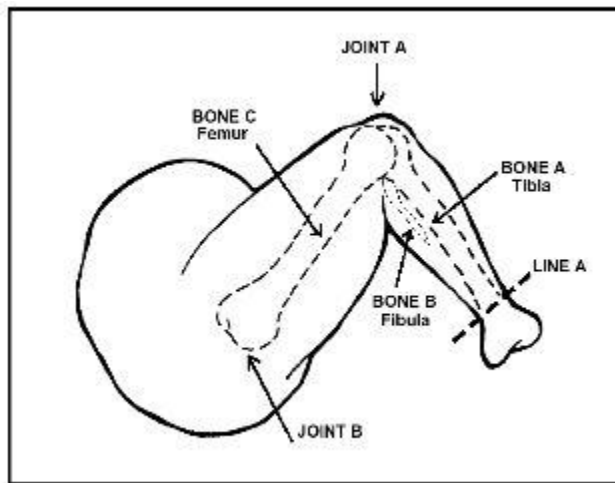


TASK CARD: Chicken Leg Dissection

From http://marshallteachers.sandi.net/teacher_sites/gillum/skeleton/chicken%20leg%20dissection/chixlegdissection.html

Dissection Drawing:



Procedure:

1. Place the chicken leg quarter on a dissecting tray
2. The following parts are present in the specimen:
 - The lower leg of the chicken is called the drumstick. It is the equivalent of the lower leg of the human.
 - The upper leg of the chicken is called the thigh, just as it is in humans.
 - The bones above the thigh are part of the hip and backbone of the chicken.
3. Look at the skin and record its properties in the results table below. Examine the skin. Note any dimples (goose bumps) which show where feathers were attached to the skin. Record data in table.
3. Remove the skin by pulling it down and off the end of the lower leg. It may be cut off if it is too difficult to remove. The yellow-white material is fat that lies under the skin. Record data in table.
4. Examine the meat. The meat is muscle, and muscles work in bundles. Separate the bundles of muscles by separating them out with your fingers. Begin by inserting your thumb into the muscle of the lower leg. You will need to push forcefully through the shiny lining (called fascia) over the muscle, but it will give way at the natural separations between the muscle bundles. Continue separating the muscle into bundles by forcing your thumb and fingers through the muscle until you are able to distinguish several separate bundles. Record your findings in the data table.
5. The strong, white cords, called tendons, hold the muscle to the bones. Some of these tendons will pull away from the bone as you separate the muscle bundles. Gently pull away the muscle from the bone and look for the tendon which connects the muscle to the bone. Write down what it looks like in the table.

6. Arteries are generally more muscular (thicker) than veins. Follow the artery superiorly as far as you can and locate as many branches as possible. Record information.
7. Nerves are generally thin, threadlike white strands found between the muscle and the nearest bone. Look for the nerve in your specimen.
8. Using the dissection scissors, cut across the tendons at Line A (see diagram). Observe the numerous tendons and pull the freed muscles down and away from the bone, as if you were peeling a banana. Careful you don't cut any ligaments that attach bone to bone. Look closely at the ligaments. Write down what they look like in the table. Examine the two bones in the lower leg. The large bone (Bone A) is the tibia. The small, toothpick-like bone (Bone B) is the fibula.
9. Bend the specimen at Joint A and observe that it is a hinge joint like our knee. Carefully cut away the muscle over Joint A. Make the cuts parallel to the bones, so you do not cut into the capsule over the joint. Remove as much of the pink muscle tissue as possible so that you can see the shiny white of the ligaments and cartilage around the joint. Locate one white band of ligament on each side of the joint. These exterior ligaments hold the bones together.
10. Bend the specimen at Joint B and rotate the femur in all directions. Observe that this joint is a ball and socket joint like our hip. Remove the muscle that covers Joint B by cutting parallel to the femur, upward toward the backbone. Remove pink muscle tissue until you see a shiny white sheet of ligament that covers the joint. Present is an exterior ligament that holds the femur in the hip socket.
11. Cut the exterior ligament over the joint by cutting all around the head of the femur. As you cut this sheet of ligament, you will notice the joint becoming very loose. When it is completely loosened, pull out and downward on the femur, so the bone comes partly out of the socket in the hip. Look into the socket and see the ligament that holds the femur in the center of the socket.
12. Cut onto the hinge joint by cutting into the top of the covering of the joint from the femur side. It will become apparent that you must remove the knee cap area to expose the menisci and ligaments within. Pull up on the knee cap area and cut through it with the scissors. You will have cut through the bursa, a sac that acts as a shock absorber for the knee joint. These are found in every joint. Pull the covering back and look into the inside of the joint. You will see more white bands of ligaments holding the bones together. Observe the shiny, white layer covering the ends of the bones is cartilage. It helps the bones slide smoothly when the leg bends. Describe it in the table below.
13. Explore and examine all the parts before cleaning the area.
14. Make sure to wash your hands with plenty of soap and water.

Results

Tissue	Color	Tissue Type/s	Thickness (mm)
Skin			
Fat			
Muscle			
Tendon			
Artery			
Ligament			
Cartilage			