

# Muscles in 3 Hours

This study aid was developed to help the student learn all the muscles on the lab objectives for unit 1 in the shortest amount of time possible. In order for this aid to work it is imperative that you already thoroughly know the skeletal system. If you do not, stop and go back to the skeletal system and return to this aid after you can say that you “own” the skeletal system.

You need to remember that when people first gave muscles their names, they gave them perfectly reasonable and logical names. They named them for the bone or process of origin or insertion, their body region, size, shape or action. Unfortunately these people were not always speaking English. When you find out the derivation of a word or any other logic used in naming muscles it is often the clue you need to learn that muscle. These muscles want to talk to you, so read on and listen to them. Ultimately, not only will you learn the muscles, but you will have learned a tool that will make you a better student.

You should now proceed with the torso, arm and leg models in front of you. Good luck!!

1. **Masseter** – This muscle elevates your mandible allowing you to chew or masticate your food therefore it is called the masseter.
2. **Buccinator** This is the muscle that forms the wall of the cheek. This muscle is the reason the cavity formed by the cheeks are called the buccal cavities. It is found inferior to the masseter.
3. **Sternocleidomastoid** – This muscle originates at the sternum and clavicle and inserts at the mastoid process of the temporal bone - therefore it is called the sternocleidomastoid.
4. **Temporalis** – This muscle lies over the temporal bone - therefore it is called the temporalis.
5. **Platysma** - This is the superficial muscle that covers the sternocleidomastoid. Platy- means plate and this muscle can be described as platelike. When the platysma loses tone it is responsible for neck “jowls” or a double chin.
6. **Deltoid** – This muscle’s insertion created the deltoid tuberosity on the lateral side of the humerus (remember you have already learned this) . . . therefore it is called the deltoid.
7. **External intercostals** – This muscle gets its name from the Latin, costa, meaning rib. Intercostal means between the ribs. External relates to the fact that there are two layers of muscles between the ribs and this is the external or outside layer - therefore it is called the external intercostals. Look in between the ribs, not on the ribs.
8. **Internal intercostals** – Same as #7 above except that it is the internal or inside layer . . . therefore it is called the internal intercostals.
9. **Pectoralis major** – This muscle gets its name from the Latin, pectus, meaning chest . . . therefore the biggest (major) muscle on the ventral surface of the chest is called pectoralis major.

10. **Pectoralis minor** – As with the pectoralis major, pectoralis refers to the chest. So this is a chest muscle, but smaller than the major so it is called minor. It is a thin, triangular muscle found beneath the pectoralis major.
11. **Serratus anterior** – This muscle gets its name from the Latin, serra, meaning saw. When you view this muscle on the anterior or ventral surface of the chest, you might think that its margin looks like the edge of a serrated knife or saw - therefore it is called serratus anterior.
12. **Infraspinatus** – The Latin prefix, infra, means below - therefore the muscle that lies just below the spine of the scapula is called the infraspinatus.
13. **Supraspinatus** - The Latin prefix, supra, means above - therefore the muscle that lies just above the spine of the scapula is called the supraspinatus.
14. **Subscapularis** – The name refers to the location of this muscle – below the scapula. This is a large triangular muscle found on the anterior surface of the scapula. It is one of the four muscles that make up the rotator cuff.
15. **Teres major** – Teres in Latin means round and smooth. This is probably not going to help you. Just memorize that the largest (major) of the two muscles inferior to the infraspinatus is the teres major.
16. **Teres minor** – Same as #15 above except that this is the smaller (minor) of the two muscles. It might also be helpful to now that this is one of the rotator cuff muscles so it attaches to the head of the humerus, the teres major is not so it is not attached to the head of humerus.
17. **Latissimus dorsi** – This muscle gets its name from the Latin, latus, meaning broad and flat. Latissimus almost sounds like the English word lateral - therefore the broad, flat muscle on the back (dorsal surface) that wraps around the side (lateral surface) is called the latissimus dorsi.
18. **Trapezius** – This muscle was named for its geometric shape, a trapezoid. It's not a very scientific definition, but some students describe a trapezoid as a triangle with a flat top - therefore the largest muscle on your back that is shaped like a trapezoid is called the trapezius.
19. **Rhomboides major** – The name of this muscle refers to its rhomboid or diamond shape. This is the larger of two muscles with this shape therefore it is the major. This muscle is located under the trapezius.
20. **Coracobrachialis** – This muscle originates on the coracoid process of the scapula and inserts on the ventral surface of the humerus under the brachialis muscle - therefore it is called the coracobrachialis. What else would you call it??!
21. **Biceps brachii** – This muscle gets its name from two Latin words: brachial which means arm and caput which means head. Bi-caput would mean two headed - therefore the two-headed muscle on the ventral surface of the upper arm is called the biceps brachii.
22. **Brachialis** – Think of this muscle as the small brachium (see #21) - therefore the smaller muscle that lies underneath the biceps brachii is called the brachialis.

23. **Brachioradialis** – This muscle originates under the brachialis muscle and then runs along the radius - therefore it is called the brachioradialis.
24. **Pronator teres** – Pronator in this muscle's name refers to how it works, it pronates the hand, which means it rotates the arm so the palm of the hand is facing downwards. Teres means round and smooth which refers to its appearance. This is a short round muscle that connects the humerus and ulna to the radius. It can be found opposite the brachioradialis.
25. **Triceps brachii** – See #21 above. This is a three (3) headed muscle and the only muscle on the dorsal surface of the upper arm.
26. **External oblique** – The Latin word obliquus means slanting. On the lateral – ventral surface portion of the abdominal region there are two slanting layers of muscle. The outermost (external) is the external oblique.
27. **Internal oblique** – See #26 above. The inner slanting layer of muscle is the internal oblique.
28. **Rectus abdominis** – Rectus is Latin for straight. The muscle that runs straight down the ventral abdominal-pelvic cavity is the rectus abdominis.
29. **Transverse abdominis** – This muscle is found in the abdominal wall beneath the internal oblique muscles. The term transverse refers to the direction of the fibers which extend across (transverse) the abdomen.
30. **Iliacus** – This muscle originates on the crest of the ilium inserting on the lesser trochanter of the femur . . . therefore this muscle is called the iliacus. To see this muscle on the torso you will need to remove the abdominal organs.
31. **Psoas major** – This muscle comes from the Greek word, psoa, meaning the muscles of the loins. When you eat a fillet of beef, it comes from these muscles called beef tenderloins. Notice that the origin of this muscle is on the lumbar vertebrae. The insertion is on the lesser trochanter of the femur. This is the reason this large muscle is called the psoas major. To see this muscle on the torso you will need to remove the abdominal organs.
32. **Iliopsoas** – When the iliacus and psoas major muscles (see #23 and #24) pass over the pubic crest on their way to the lesser trochanter of the femur, they become so intertwined that you can no longer see them as separate muscles. This muscle mass is now called the iliopsoas.
33. **Gracilis** – Gracilis is Latin for slender. Do you know a girl names Grace who is slender? The thin, slender muscle on the medial surface of the upper leg is the gracilis.
34. **Adductor longus** – All adductor muscles move body limbs towards the mid-line of the body. Adductors of the leg, therefore, have to be on the inside or medial surface of the leg. This muscle is located on the medial surface of the upper surface of the upper leg just anterior to the gracilis muscle. And yes, it is the longest adductor!

35. **Adductor magnus** – Magnum is the Latin word for large. The largest adductor muscle is located on the medial surface of the upper leg just posterior to the gracilis muscle. You would expect the largest adductor to be toward the posterior of the upper leg because the entire upper leg is much more heavily muscled posteriorly - therefore this muscle is called the adductor magnus.
36. **Gluteus maximus** – Gluteus is from the Greek word meaning buttock. Maximus is Latin for greatest - therefore the largest and greatest buttock muscle is called the gluteus maximus.
37. **Gluteus medius** – (See #36). Medius is Latin for middle. The middle sized gluteal muscle is the gluteus medius. It is superior and lateral to the Gluteus maximus.
38. **Biceps femoris** – You already know that biceps means two headed and the location of the femur. If you can remember that the Biceps brachii that flexes the lower arm is located on the ventral surface of the upper arm and that the lower arm and lower leg work in an opposite manner you now should know to look for the biceps femoris on the lateral/dorsal surface of the upper leg.
39. **Rectus femoris** – You already know that rectus means straight. The muscle on the ventral surface of the upper leg that runs straight down the femur is called the rectus femoris.
40. **Sartorius** – In Latin the word sartor means a tailor. The muscle used in crossing your legs in the tailor's position is called the sartorius. It runs diagonally across the ventral upper leg.
41. **Semimembranosus** – Imagine that the first person to name this muscle thought that this muscle was so thin and flat, all the way to the end, that he thought it looked more like a membrane than a muscle. Therefore he called it the semimembranosus. Look for it on the medial dorsal portion of the upper leg. Most of this muscle lies under the semitendinosus (see #42).
42. **Semitendinosus** – This same person (see #41) upon seeing a muscle that ended in an extra long cord-like structure, thought it looked more like a tendon than a muscle. Therefore he called it the semitendinosus. Most of this muscle lies over the semimembranosus.
43. **Vastus intermedius** – Vastus is Latin for great. Its English derivative is vast or huge. The great, big huge muscle in the middle of the upper leg, under the rectus femoris is called the vastus intermedius. You will not be able to see this muscle on the leg model unless you remove the rectus femoris. DO NOT remove it! However, it is visible on the muscle chart that shows the second layer of muscles.
44. **Vastus lateralis** – This great, big, huge muscle on the ventral surface of the upper leg that is lateral is the vastus lateralis.
45. **Vastus medialis** – This great, big, huge muscle on the ventral surface of the upper leg that is located toward the mid-line of the body is the vastus medialis.
46. **Gastrocnemius** – This word comes from a Greek word, meaning calf of the leg. Also the French word, gaster, means belly. The muscle in the calf of the leg that really “bellies up” when you stand on your toes is the gastrocnemius.

47. **Soleus** – Solea is a Latin word that means sole of the foot. The soleus, which lies under the gastrocnemius, works with it (synergistically) to extend the sole of our feet when we walk.
48. **Tendon of Achilles** (Calcaneal tendon) – Achilles is a Greek mythical warrior who was vulnerable only in the heel. This is the tendon that attaches the gastrocnemius and soleus to the calcaneus of the foot.
49. **Tibialis anterior** – This muscle is anterior (ventral) to the tibia.
50. **Extensor digitorum longus** – The name of this muscle refers in part to one of its actions which is to extend the toes (digits). There are 2 muscles involved in this action and this muscle is the longer of the two therefore it is called longus. This muscle is located lateral to the tibialis anterior.
51. **Hamstring muscles** – This is another name for the group of muscles located on the dorsal side of the upper leg: the biceps femoris, semitendinosus, and the semimembranosus.
52. **Quadriceps muscles** – This is another name for the four muscles on the ventral side of the upper leg: the rectus femoris, vastus lateralis, vastus medialis, and vastus intermedius.

Now go over these muscles without this study aid and listen to them talk to you.