

## **Bio 135 Muscles activity -12**

**Student Name:**

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There are several exercises associated with this activity. Please complete all portions and return them to me at the beginning of our next lab session

**Exercise one:** Names of muscles, Actions, Origen and insertion

On the following page are select muscles have been deemed important by the health programs at BCTC. Due to the extent of the muscular system it is impossible to include all muscles in this exercise. These muscles have been selected after consultation with the health professions on campus as to their clinical relevance to their fields.

You are to identify the origins insertions and actions of each muscle listed. Some muscles have origins and insertions that cover a large area. You only need name the major attachments.

**Exercise 2.** Answer the question using your text and the CD rom provided with your text.

**Exercise 3:** Label the indicated muscles on your handout.

**Exercise 4:** We will do an in class exercise where we work in pairs to build muscles on a model. We will not build all muscles but will build the ones highlighted. This exercise should only take this one lab but if you find you are not finished you will need to come into lab outside of regular class time to finish the exercise.

Student Name: \_\_\_\_\_

Muscle	Origin	Insertion	Action
<b>Head and neck</b>			
<b>Buccinator</b>			
Zygomaticus/levator anguli superioris			
<b>Masseter</b>			
Frontalis			
<b>Orbicularis oculi</b>			
<b>Orbicularis oris</b>			
<b>Sternocleidomastoid</b>			
<b>Temporalis</b>			
<b>Pectoral girdle and arm</b>			
<b>Biceps Brachii</b>			
<b>Brachialis</b>			
Brachioradialis			
<b>Deltoid</b>			
Flexor digitorum superficialis			
<b>Pectoralis Major and minor</b>			
Pronator teres			
Supinator.			
<b>Trapezius</b>			
Triceps			

Student Name: \_\_\_\_\_

Muscle	Origin	Insertion	Action
<b>Thorax and abdomen</b>			
External Oblique (Do not build but fill in related information)			
Intercostals			
<b>Latisimus dorsai</b>			
Rectus abdominus (do not build but fill in information)			
<b>Pelvic girdle and Leg</b>			
<b>Adductor group (magnus, longus and brevis)</b>			
Biceps femoris			
<b>Gastrocnemious</b>			
<b>Gluteus maximus</b>			
<b>Gluteus medius</b>			
<b>Gluteus Minimus</b>			
Rectus Femoris			
Sartorius			
<b>Soleus</b>			
Tibialis anterior			
Vastus Lateralis			
Vastus Medialis			

Bio 135: Student Name: \_\_\_\_\_

Instructions: View the Interactive disc provided with your text over the materials on Muscle. From your viewing of the materials and readings in your text book answer the following questions:

1. What are the three muscle types? \_\_\_\_\_

2. Which of these are voluntary? \_\_\_\_\_

3. Which of these has intercalated discs? \_\_\_\_\_

4. What is the structural and functional unit of a muscle? \_\_\_\_\_

5. What are the two proteins that interact with one another to make a muscle move?

\_\_\_\_\_

6. What ion is needed for the muscles to function? \_\_\_\_\_

7. What is the layer of connective tissue surrounding a single muscle cell? \_\_\_\_\_

8. What is the compound used to convert ADP back to ATP during short bursts of activity?

\_\_\_\_\_

9. The process of adding motor units to increase force is known as: \_\_\_\_\_

10. A motor unit is defined as: \_\_\_\_\_

11. What is the thick filament made of? \_\_\_\_\_

12. What is the name of the current theory that explains muscle activity?

\_\_\_\_\_

13. Bundles of muscle cells are called: \_\_\_\_\_

14. Muscles are attached to bone by: \_\_\_\_\_

15. What is the molecule shaped like a double headed golf club? \_\_\_\_\_

16. What is the thin filament made of? \_\_\_\_\_

17. What is the regulatory protein that blocks the binding sites on actin? \_\_\_\_\_

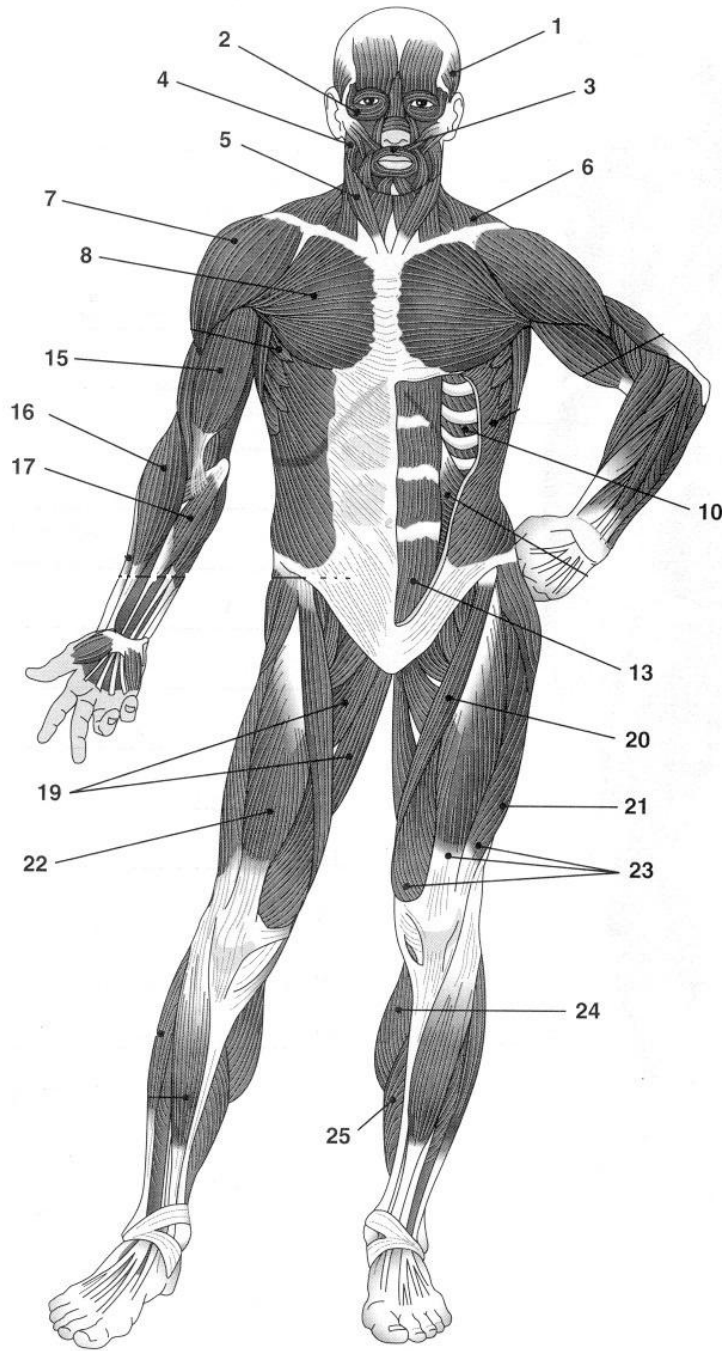
18,19,20 Name three criteria used to name muscles.

\_\_\_\_\_

\_\_\_\_\_

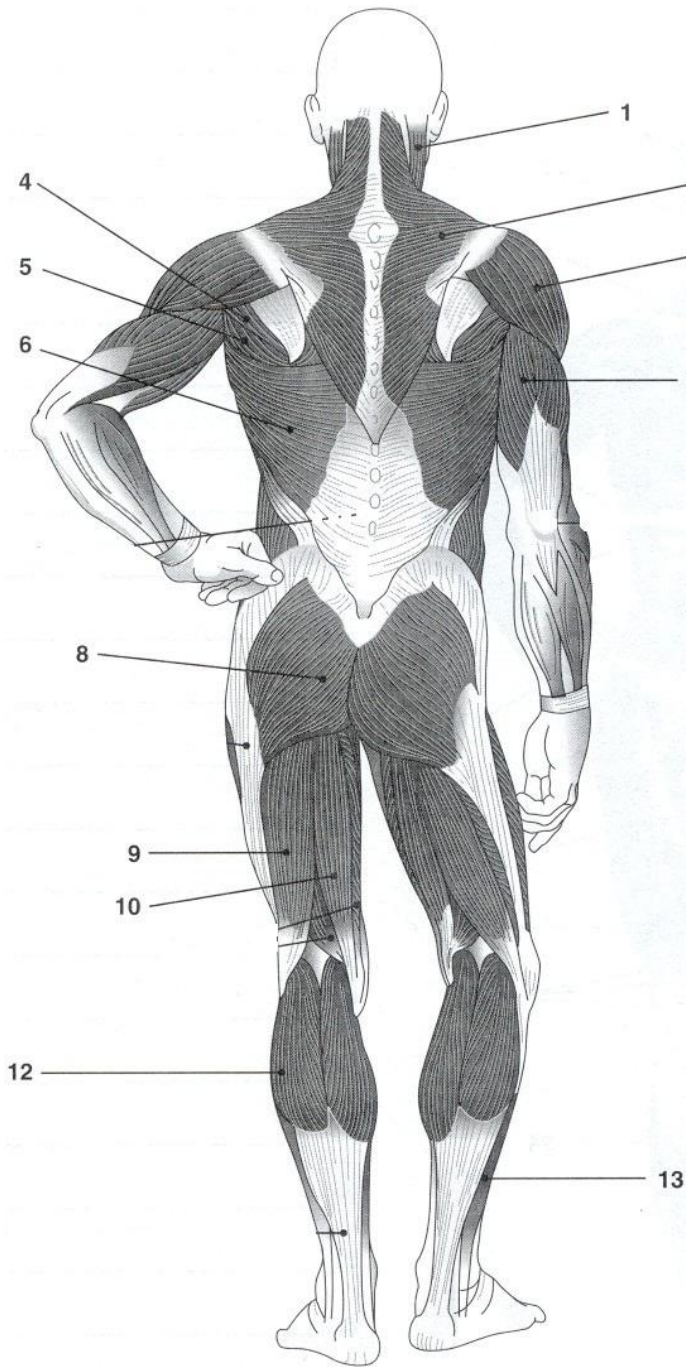
\_\_\_\_\_

Muscles labeling Exercise:



1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
10. \_\_\_\_\_
13. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_
19. \_\_\_\_\_
20. \_\_\_\_\_
21. \_\_\_\_\_
22. \_\_\_\_\_
23. \_\_\_\_\_
24. \_\_\_\_\_
25. \_\_\_\_\_

Superficial muscles, anterior view



1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_

Superficial muscles, posterior view