

NAME _____ LAB TIME/DATE _____

REVIEW SHEET
exercise

Gross Anatomy of the Muscular System

15

Classification of Skeletal Muscles

1. Several criteria were given relative to the naming of muscles. Match the criteria (column B) to the muscle names (column A). Note that more than one criterion may apply in some cases.

Column A	Column B
<u>e, g</u> 1. gluteus maximus	a. action of the muscle
<u>a, g</u> 2. adductor magnus	b. shape of the muscle
<u>d, e</u> 3. biceps femoris	c. location of the origin and/or insertion of the muscle
<u>e, f</u> 4. transversus abdominis	d. number of origins
<u>a, c, e</u> 5. extensor carpi ulnaris	e. location of the muscle relative to a bone or body region
<u>b</u> 6. trapezius	f. direction in which the muscle fibers run relative to some imaginary line
<u>e, f</u> 7. rectus femoris	g. relative size of the muscle
<u>e, f</u> 8. external oblique	

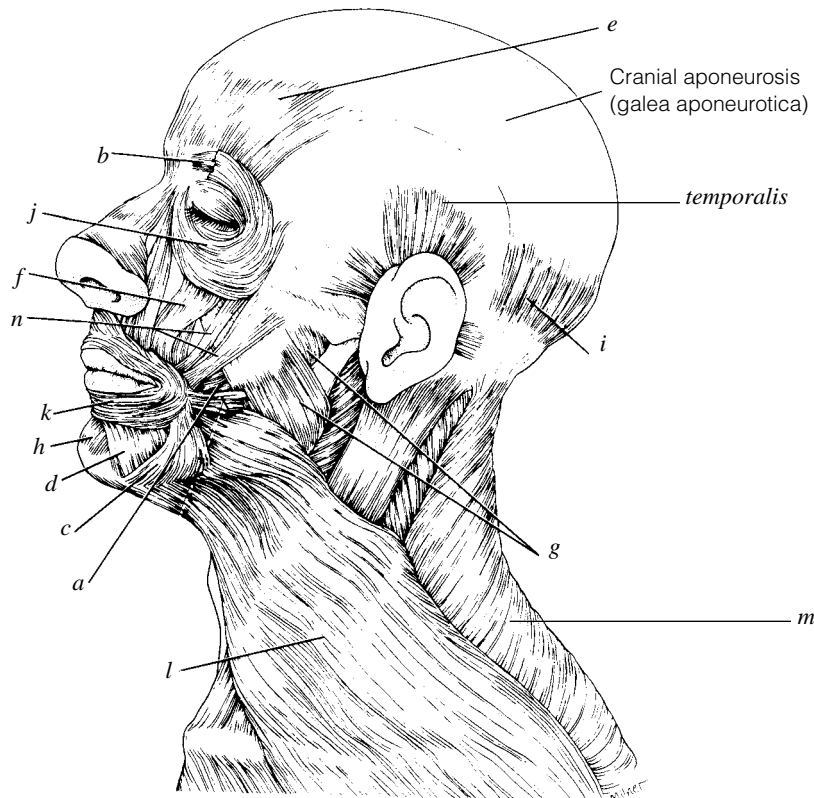
2. When muscles are discussed relative to the manner in which they interact with other muscles, the terms shown in the key are often used. Match the key terms with the appropriate definitions.

Key: a. antagonist b. fixator c. prime mover d. synergist

<u>c; prime mover</u> 1. agonist
<u>b; fixator</u> 2. postural muscles, for the most part
<u>a; antagonist</u> 3. reverses and/or opposes the action of a prime mover
<u>d; synergist</u> 4. stabilizes a joint so that the prime mover may act at more distal joints
<u>d; synergist</u> 5. performs the same movement as the prime mover
<u>b; fixator</u> 6. immobilizes the origin of a prime mover

Muscles of the Head and Neck

3. Using choices from the list at the right, correctly identify muscles provided with leader lines on the diagram.



- a. buccinator
- b. corrugator supercilii
- c. depressor anguli oris
- d. depressor labii inferioris
- e. frontalis
- f. levator labii superioris
- g. masseter
- h. mentalis
- i. occipitalis
- j. orbicularis oculi
- k. orbicularis oris
- l. platysma
- m. trapezius
- n. zygomaticus major and minor

4. Using the terms provided above, identify the muscles described next.

 n 1. used in smiling

 a 2. used to suck in your cheeks

 j 3. used in blinking and squinting

 c 4. used to pout (pulls the corners of the mouth downward)

 e 5. raises your eyebrows for a questioning expression

 b 6. used to form the vertical frown crease on the forehead

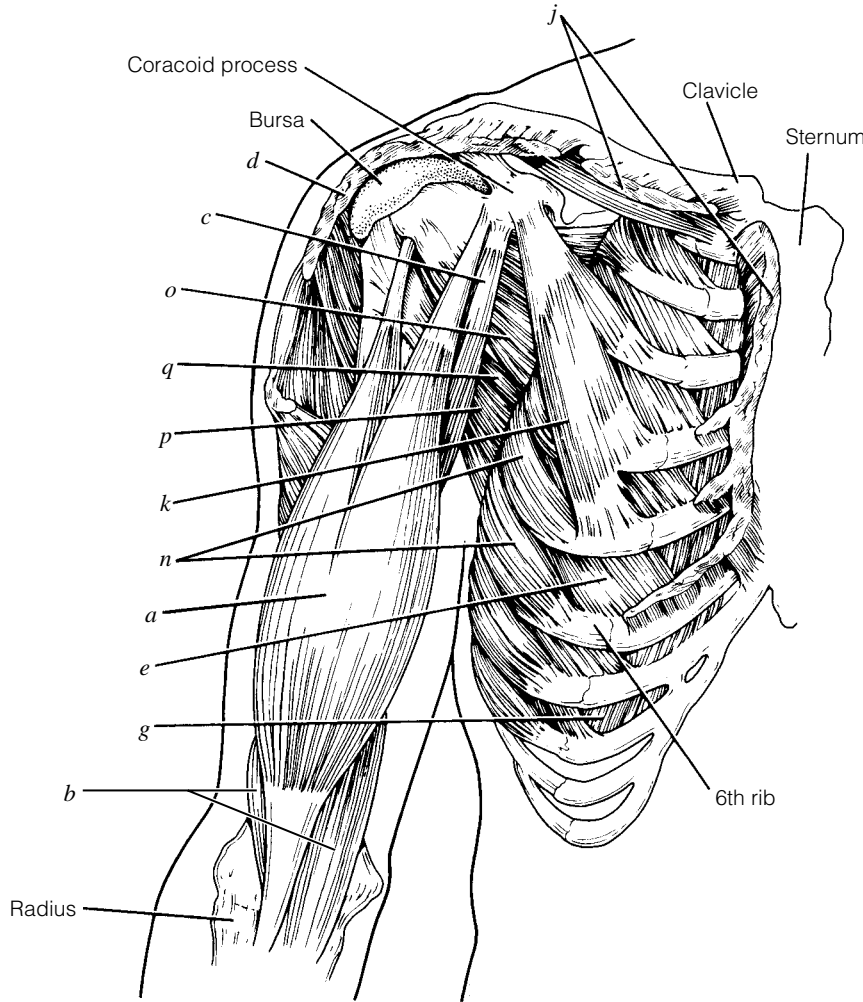
 k 7. your "kisser"

 g 8. prime mover to raise the lower jawbone

 l 9. tenses skin of the neck during shaving

Muscles of the Trunk

5. Correctly identify both intact and transected (cut) muscles depicted in the diagram, using the terms given at the right. (Not all terms will be used in this identification.)



- a. biceps brachii
- b. brachialis
- c. coracobrachialis
- d. deltoid (cut)
- e. external intercostals
- f. external oblique
- g. internal intercostals
- h. internal oblique
- i. latissimus dorsi
- j. pectoralis major (cut)
- k. pectoralis minor
- l. rectus abdominis
- m. rhomboids
- n. serratus anterior
- o. subscapularis
- p. teres major
- q. teres minor
- r. transversus abdominis
- s. trapezius

6. Using the key provided in question 5 above, identify the major muscles described next.

l _____ 1. a major spine flexor

i _____ 2. prime mover for pulling the arm posteriorly

j _____ 3. prime mover for shoulder flexion

f, h, r _____ 4. assume major responsibility for forming the abdominal girdle (three pairs of muscles)

i _____ 5. pulls the shoulder backward and downward

d _____ 6. prime mover of shoulder abduction

i, j _____ 7. important in shoulder adduction; antagonists of the shoulder abductor (two muscles)

n _____ 8. moves the scapula forward and downward

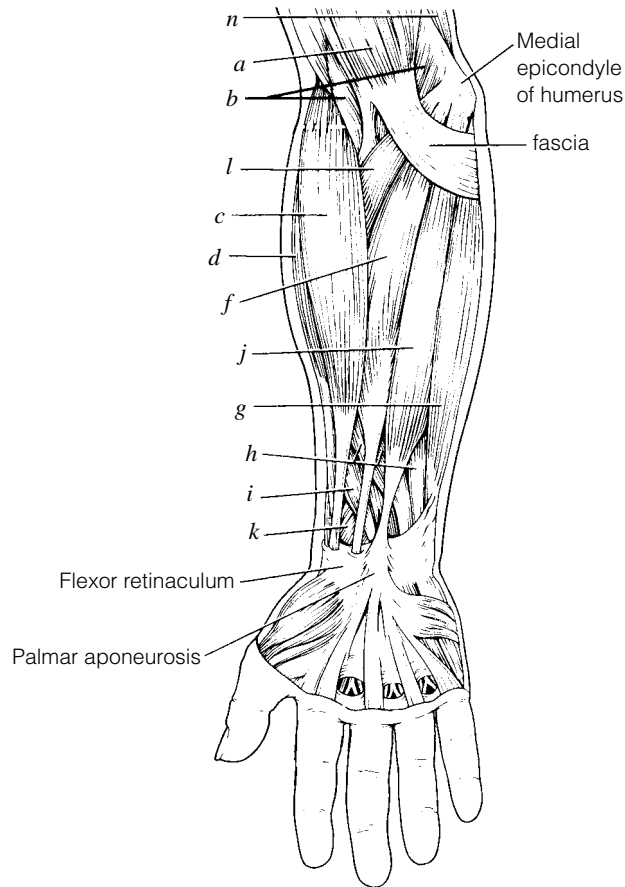
e _____ 9. small, inspiratory muscles between the ribs; elevate the ribs

s _____ 10. extends the head

m _____ 11. pull the scapulae medially

Muscles of the Upper Limb

7. Using terms from the list on the right, correctly identify all muscles provided with leader lines in the diagram. (Note that not all the listed terms will be used in this exercise.)



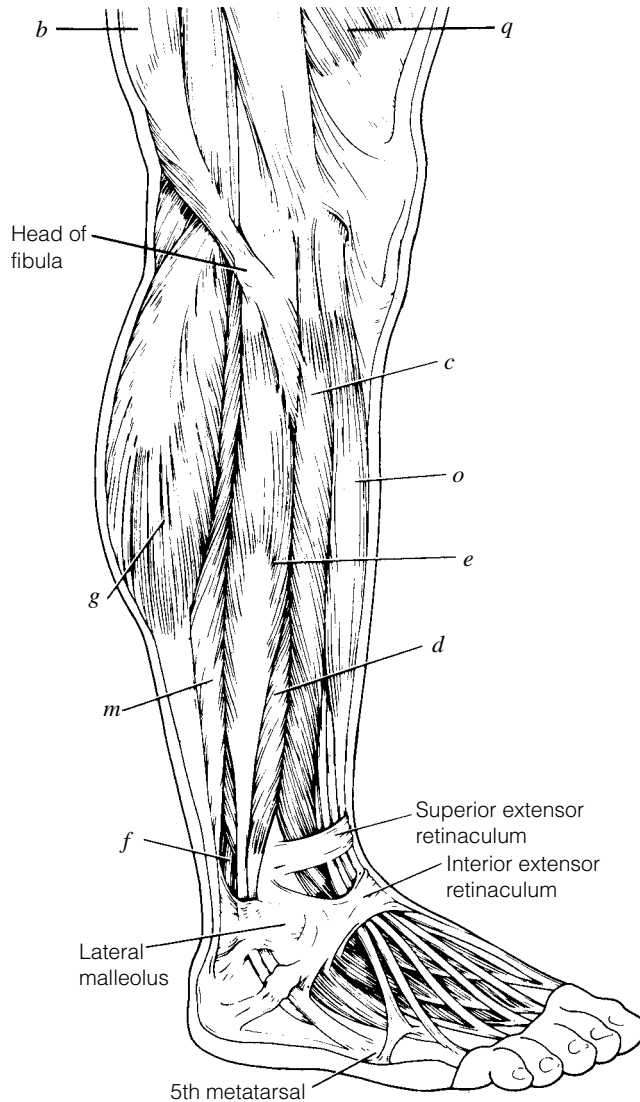
- a. biceps brachii
- b. brachialis
- c. brachioradialis
- d. extensor carpi radialis longus
- e. extensor digitorum
- f. flexor carpi radialis
- g. flexor carpi ulnaris
- h. flexor digitorum superficialis
- i. flexor pollicis longus
- j. palmaris longus
- k. pronator quadratus
- l. pronator teres
- m. supinator
- n. triceps brachii

8. Use the terms provided in question 1 to identify the muscles described next.

- | | |
|---|--|
| <u>a, m</u> 1. places the palm upward (two muscles) | <u>h</u> 6. flexes wrist and middle phalanges |
| <u>a</u> 2. flexes the forearm and supinates the hand | <u>k, l</u> 7. pronate the hand (two muscles) |
| <u>b, c</u> 3. forearm flexors; no role in supination (two muscles) | <u>i</u> 8. flexes the thumb |
| <u>n</u> 4. elbow extensor | <u>d</u> 9. extends and abducts the wrist |
| <u>f</u> 5. power wrist flexor and abductor | <u>e</u> 10. extends the wrist and digits |
| | <u>j</u> 11. flat muscle that is a weak wrist flexor |

Muscles of the Lower Limb

9. Using the terms listed to the right, correctly identify all muscles provided with leader lines in the diagram below. (Not all listed terms will be used in this exercise.)



- a. adductor group
- b. biceps femoris
- c. extensor digitorum longus
- d. fibularis brevis
- e. fibularis longus
- f. flexor hallucis longus
- g. gastrocnemius
- h. gluteus maximus
- i. gluteus medius
- j. rectus femoris
- k. semimembranosus
- l. semitendinosus
- m. soleus
- n. tensor fasciae latae
- o. tibialis anterior
- p. tibialis posterior
- q. vastus lateralis

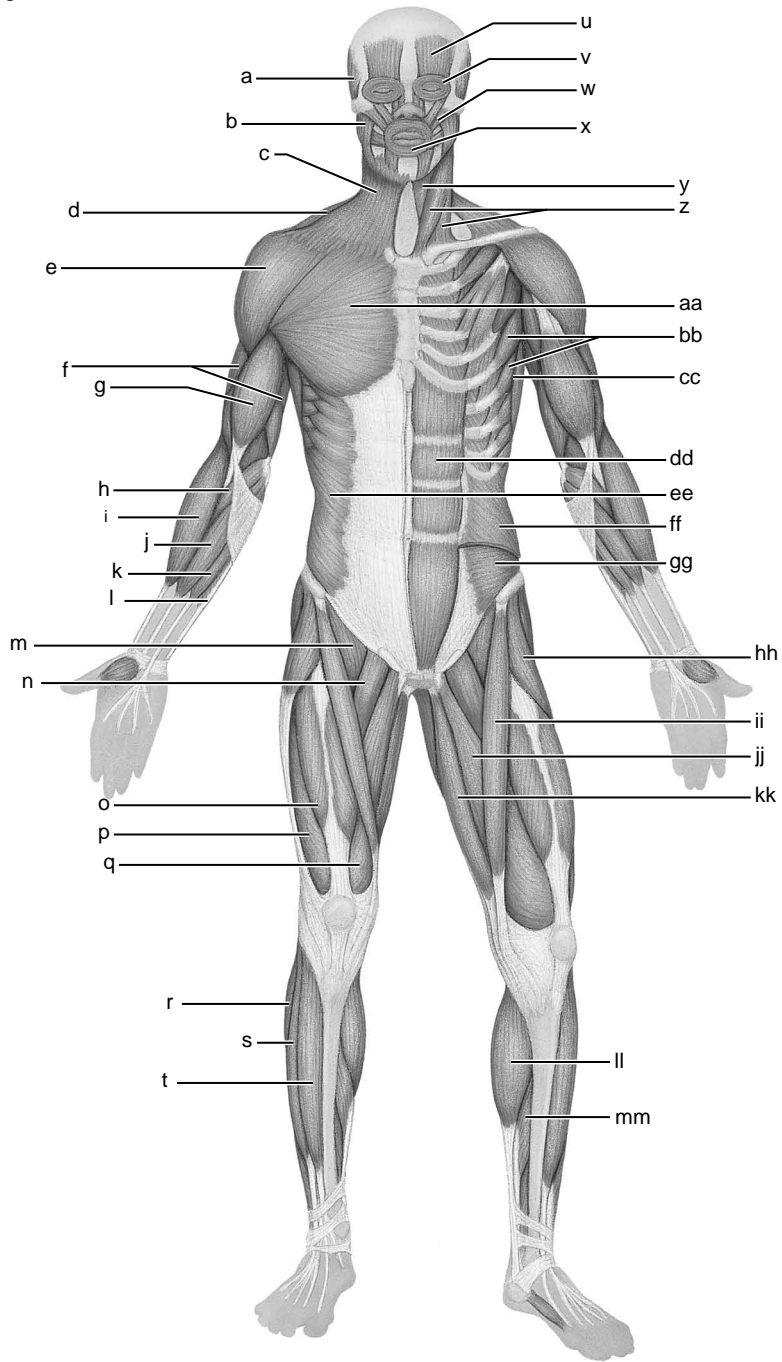
10. Use the key terms in exercise 9 to respond to the descriptions below.

- | | |
|--|--|
| <u>f</u> 1. flexes the great toe and inverts the ankle | <u>o</u> 7. prime mover of ankle dorsiflexion |
| <u>d, e</u> 2. lateral compartment muscles that plantar flex and evert the ankle (two muscles) | <u>a</u> 8. allow you to draw your legs to the midline of your body, as when standing at attention |
| <u>i, n</u> 3. move the thigh laterally to take the "at ease" stance (two muscles) | <u>c</u> 9. extends the toes |
| <u>h</u> 4. used to extend the hip when climbing stairs | <u>b, k, l</u> 10. extend thigh and flex knee (three muscles) |
| <u>g, m</u> 5. prime movers of ankle plantar flexion (two muscles) | <u>j</u> 11. extends knee and flexes thigh |
| <u>p</u> 6. major foot inverter | |

General Review: Muscle Recognition

11. Identify the lettered muscles in the diagram of the human anterior superficial musculature by matching the letter with one of the following muscle names:

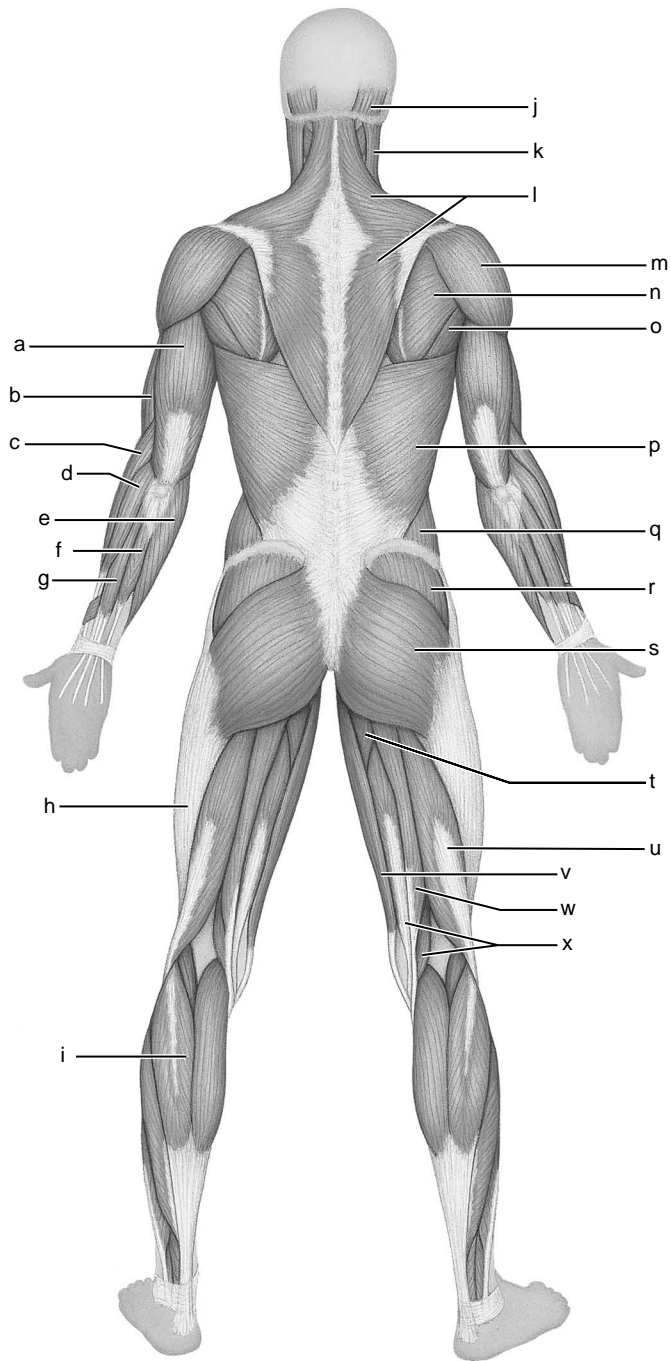
- jj 1. adductor longus
- g 2. biceps brachii
- i 3. brachioradialis
- e 4. deltoid
- s 5. extensor digitorum longus
- ee 6. external oblique
- r 7. fibularis longus
- j 8. flexor carpi radialis
- l 9. flexor carpi ulnaris
- u 10. frontalis
- ll 11. gastrocnemius
- kk 12. gracilis
- m 13. iliopsoas
- ff 14. internal oblique
- cc 15. latissimus dorsi
- b 16. masseter
- v 17. orbicularis oculi
- x 18. orbicularis oris
- k 19. palmaris longus
- n 20. pectineus
- aa 21. pectoralis major
- c 22. platysma
- h 23. pronator teres
- dd 24. rectus abdominis
- o 25. rectus femoris
- ii 26. sartorius
- bb 27. serratus anterior
- mm 28. soleus
- z 29. sternocleidomastoid



- y 30. sternohyoid
- a 31. temporalis
- hh 32. tensor fasciae latae
- t 33. tibialis anterior
- gg 34. transversus abdominis
- d 35. trapezius
- f 36. triceps brachii
- p 37. vastus lateralis
- q 38. vastus medialis
- w 39. zygomaticus

12. Identify each of the lettered muscles in this diagram of the human posterior superficial musculature by matching its letter to one of the following muscle names:

- t _____ 1. adductor magnus
- u _____ 2. biceps femoris
- b _____ 3. brachialis
- c _____ 4. brachioradialis
- m _____ 5. deltoid
- d _____ 6. extensor carpi radialis longus
- f _____ 7. extensor carpi ulnaris
- g _____ 8. extensor digitorum
- q _____ 9. external oblique
- e _____ 10. flexor carpi ulnaris
- i _____ 11. gastrocnemius
- s _____ 12. gluteus maximus
- r _____ 13. gluteus medius
- v _____ 14. gracilis
- h _____ 15. iliotibial tract (tendon)
- n _____ 16. infraspinatus
- p _____ 17. latissimus dorsi
- j _____ 18. occipitalis
- x _____ 19. semimembranosus
- w _____ 20. semitendinosus
- k _____ 21. sternocleidomastoid
- o _____ 22. teres major
- l _____ 23. trapezius
- a _____ 24. triceps brachii



General Review: Muscle Descriptions

13. Identify the muscles described below by completing the statements:

1. The deltoid, vasti, and gluteus maximus and medius are commonly used for intramuscular injections (three muscles).
2. The insertion tendon of the quadriceps group contains a large sesamoid bone, the patella.
3. The triceps surae insert in common into the calcaneal tendon.
4. The bulk of the tissue of a muscle tends to lie proximal to the part of the body it causes to move.
5. The extrinsic muscles of the hand originate on the humerus, radius, and ulna.
6. Most flexor muscles are located on the anterior aspect of the body; most extensors are located posteriorly. An exception to this generalization is the extensor-flexor musculature of the knee.