MUSCLE MOVEMENTS, TYPES, AND NAMES

- 14. Relative to general terminology concerning muscle activity, first label the following structures on Figure 6-5: insertion, origin, tendon, resting muscle, and contracting muscle. Next, identify the two structures named below by choosing different colors for the coding circles and the corresponding structures in the figure.
 - Movable bone
 - Immovable bone

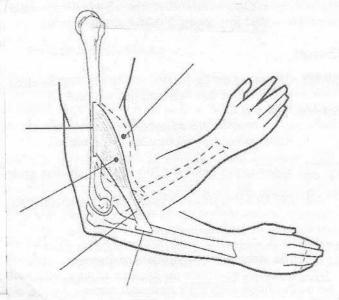


Figure 6-5

16. The terms provided in the key are often used to describe the manner in which muscles interact with other muscles. Select the key terms that apply to the following definitions and insert the correct letter or term in the answer blanks.

Key Choices

| A. Antagonist | B. Fixator | C. Prime mover | D. Synergist |
|---------------|-------------|---------------------------|----------------------------|
| | 1. Agonis | St | |
| | 2. Postur | al muscles for the most | part |
| | 3. Stabiliz | | orime mover can act at mor |
| | 4. Perform | ms the same movemen | t as the prime mover |
| | 5. Revers | ses and/or opposes the | action of a prime mover |
| | 6. Immol | oilizes the origin of a p | rime mover |

17. Several criteria are applied to the naming of muscles. These are provided in Column B. Identify which criteria pertain to the muscles listed in Column A and enter the correct letter(s) in the answer blank.

| | Column A | Column B |
|--|---------------------------|---|
| n danis o | 1. Gluteus maximus | A. Action of the muscle |
| | 2. Adductor magnus | B. Shape of the muscle |
| the legate | 3. Biceps femoris | C. Location of the muscle's origin and/or insertion |
| n <u>noire</u> e ad e ee r | 4. Abdominis transversus | D. Number of origins |
| nd <u>o w</u> ov | 5. Extensor carpi ulnaris | E. Location of muscle relative to a bone or body region |
| 3/15 TV 3/14 | 6. Trapezius | F. Direction in which the muscle fibers run relative to |
| sklerjen i r | 7. Rectus femoris | some imaginary line |
| n elem | 8. External oblique | G. Relative size of the muscle |

GROSS ANATOMY OF THE SKELETAL MUSCLES Muscles of the Head

18. Identify the major muscles described in Column A by choosing a response from Column B. Enter the correct letter in the answer blank. Select a different color for each muscle described and color in the coding circle and corresponding muscle on Figure 6–6.

| | Column A | Column B |
|-----------|---|------------------------|
| O | 1. Used in smiling | A. Buccinator |
| 0 | 2. Used to suck in your cheeks | B. Frontalis |
| \circ | 3. Used in winking | C. Masseter |
| 0 | 4. Used to form the horizontal frown crease on the forehead | D. Orbicularis oculi |
| 0 | 5. The "kissing" muscle | E. Orbicularis oris |
| O | 6. Prime mover of jaw closure | F. Sternocleidomastoid |
| | 7. Synergist muscle for jaw closure | G. Temporalis |
| \circ | 8. Prime mover of head flexion; a two-headed | H. Trapezius |
| \circ — | muscle | I. Zygomaticus |

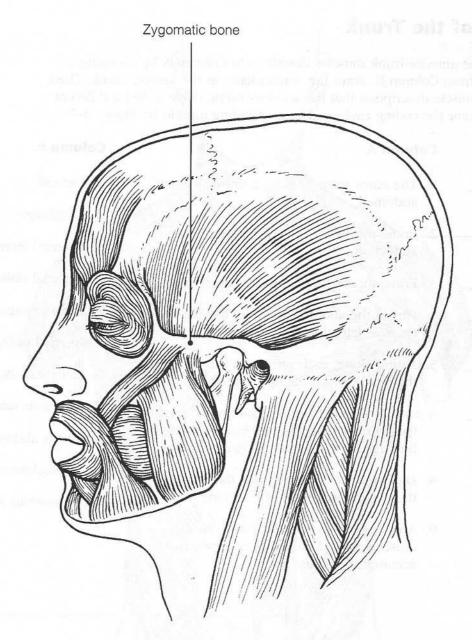


Figure 6-6

Muscles of the Trunk

19. Identify the anterior trunk muscles described in Column A by choosing a response from Column B. Enter the correct letter in the answer blank. Then, for each muscle description that has a color-coding circle, select a different color to color the coding circle and corresponding muscle on Figure 6–7.

| | Column A | Column B |
|---|---|--------------------------|
| O | _ 1. The name means "straight muscle of the abdomen" | A. Deltoid |
| | | B. Diaphragm |
| 0 | Prime mover for shoulder flexion and adduction | C. External intercostal |
| 0 | _ 3. Prime mover for shoulder abduction | D. External oblique |
| 0 | 4. Part of the abdominal girdle; forms the | E. Internal intercostal |
| | external lateral walls of the abdomen | F. Internal oblique |
| O | Acting alone, each muscle of this pair turns the head toward the opposite shoulder | G. Latissimus dorsi |
| | 6. and 7. Besides the two abdominal muscles | H. Pectoralis major |
| | (pairs) named above, two muscle pairs that help form the natural abdominal girdle | I. Rectus abdominis |
| | 8. Deep muscles of the thorax that promote | J. Sternocleidomastoid |
| | the inspiratory phase of breathing | K. Transversus abdominis |
| - | An unpaired muscle that acts with the muscles named immediately above to accomplish inspiration | |

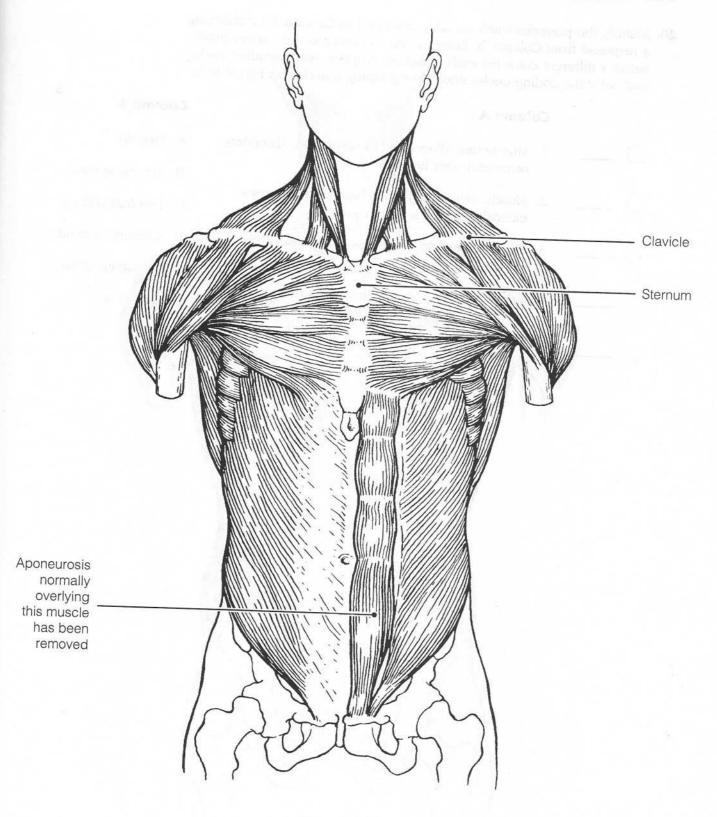


Figure 6-7

20. Identify the posterior trunk muscles described in Column A by choosing a response from Column B. Enter the correct letter in the answer blank. Select a different color for each muscle description with a coding circle and color the coding circles and corresponding muscles on Figure 6–8.

| | Column A | Column B |
|------------|---|---------------------|
| 0 | Muscle that allows you to shrug your shoulders or extend your head | A. Deltoid |
| | or extend your need | B. Erector spinae |
| O | Muscle that adducts the shoulder and causes extension of the shoulder joint | C. External oblique |
| \bigcirc | 3. Shoulder muscle that is the antagonist of the | D. Gluteus maximus |
| | muscle just described | E. Latissimus dorsi |
| | 4. Prime mover of back extension; a deep composite muscle consisting of three columns | F. Trapezius |
| | 5. Large paired superficial muscle of the lower back | |

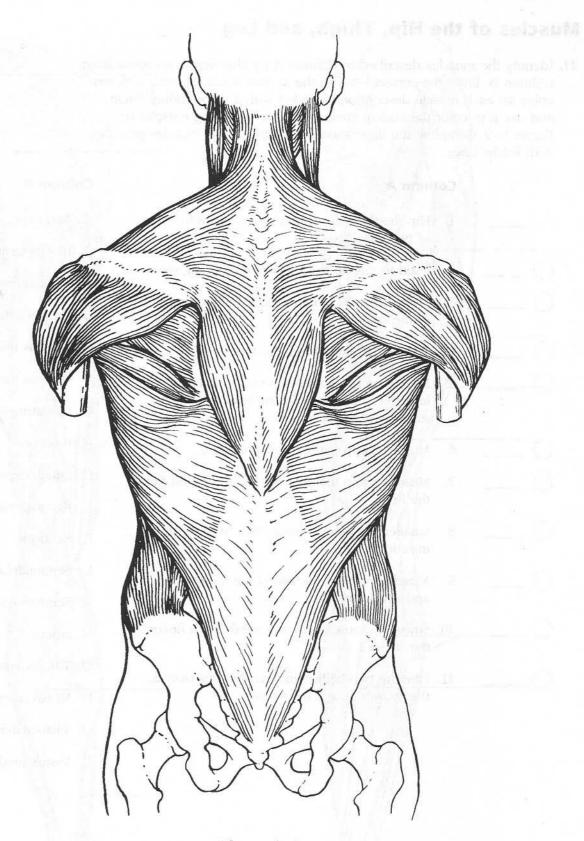


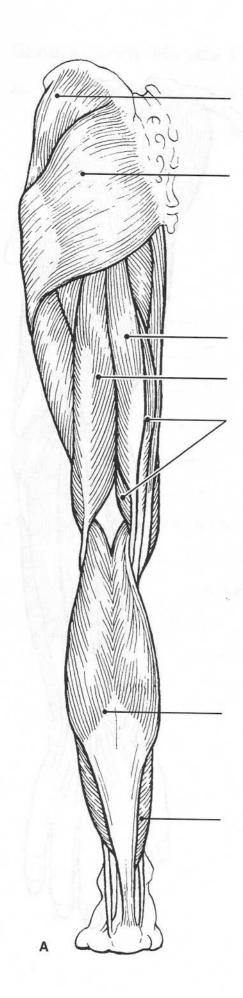
Figure 6-8

Muscles of the Hip, Thigh, and Leg

21. Identify the muscles described in Column A by choosing a response from Column B. Enter the correct letter in the answer blank. Select a different color for each muscle description provided with a color-coding circle, and use it to color the coding circles and corresponding muscles on Figure 6–9. Complete the illustration by labeling those muscles provided with leader lines.

| | Column A | Column B |
|----------|--|-----------------------|
| | Hip flexor, deep in pelvis; a composite of two muscles | A. Adductors |
| | | B. Biceps femoris |
| 0 | 2. Used to extend the hip when climbing stairs | C. Fibularis muscles |
| 0 | 3. "Toe dancer's" muscle; a two-bellied muscle of the calf | D. Gastrocnemius |
| 0 | 4. Inverts and dorsiflexes the foot | E. Gluteus maximus |
| 0 | 5. Muscle group that allows you to draw your | F. Gluteus medius |
| | legs to the midline of your body, as when standing at attention | G. Hamstrings |
| 0 | 6. Muscle group that extends the knee | H. Iliopsoas |
| 0 | 7. Muscle group that extends the thigh and flexes | I. Quadriceps |
| | the knee | J. Rectus femoris |
| 0 | Smaller hip muscle commonly used as an injection site | K. Sartorius |
| 0 | 9. Muscle group of the lateral leg; plantar flex | L. Semimembranosus |
| | and evert the foot | M. Semitendinosus |
| 0 | Strap-like muscle that is a weak thigh flexor; the "tailor's muscle" | N. Soleus |
| O | 11. Like the two-bellied muscle that lies over it, | O. Tibialis anterior |
| <u> </u> | this muscle is a plantar flexor | P. Vastus intermedius |
| | | Q. Vastus lateralis |
| | | R. Vastus medialis |





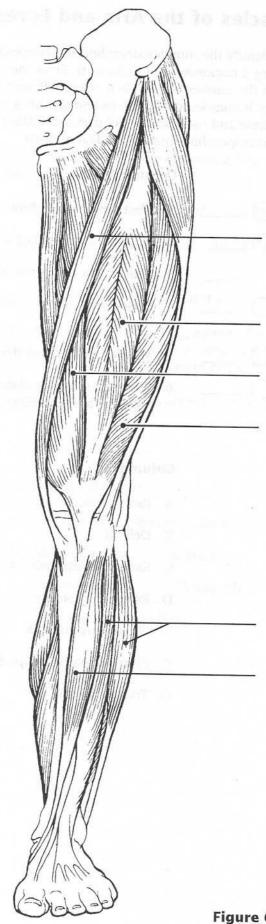


Figure 6-9

Muscles of the Arm and Forearm

22. Identify the muscles described in Column A by choosing a response from Column B. Enter the correct letter in the answer blank. Then select different colors for each muscle description provided with a color-coding circle and use them to color in the coding circles and corresponding muscles on Figure 6-10.

Column A 1. Wrist flexor that follows the ulna 2. Muscle that extends the fingers 3. Muscle that flexes the fingers 4. Muscle that allows you to bend (flex) the elbow 5. Muscle that extends the elbow 6. Powerful shoulder abductor, used to raise the arm overhead Column B A. Biceps brachii B. Deltoid C. Extensor carpi radialis D. Extensor digitorum E. Flexor carpi ulnaris

F. Flexor digitorum superficialis

G. Triceps brachii

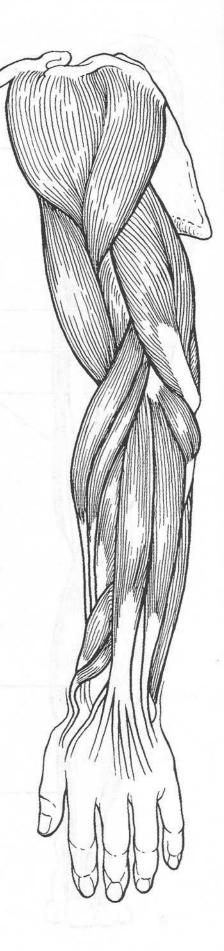


Figure 6-10

General Body Muscle Review

| | aı | nswers in the ansv | ver blanks. | ents describing muscles. Insert the correct |
|-----|-------------|--------------------|--------------|---|
| | - | | 1. 2. | Three muscles— <u>(1)</u> , <u>(2)</u> , and <u>(3)</u> —are commonly used for intramuscular injections in adults. |
| | | | 2 Oriette c | The insertion tendon of the(4)_ group contains a large sesamoid bone, the patella. |
| | _ | | 4. | The triceps surae insert in common into the _(5)_ tendon. |
| | _ | | | The bulk of the tissue of a muscle tends to lie <u>(6)</u> to the part of the body it causes to move. |
| | | | | The extrinsic muscles of the hand originate on the(7) |
| | _ | | | Most flexor muscles are located on the <u>(8)</u> aspect of the body; most extensors are located <u>(9)</u> . An exception to this generalization is the extensor-flexor musculature of the <u>(10)</u> . |
| | _ | | | The pectoralis major and deltoid muscles act synergistically to _(11)_ the arm. |
| | ē0 <u> </u> | | 11. | |
| 24. | Ci | rcle the term that | does not bel | long in each of the following groupings. |
| | 1. | Vastus lateralis | Vastus n | nedialis Knee extension Biceps femoris |
| | 2. | Latissimus dorsi | Pecto | ralis major Shoulder adduction Antagonists |
| | 3. | Buccinator | Frontalis | Masseter Mastication Temporalis |
| | 4. | Vastus medialis | Rectus fe | emoris Iliacus Origin on coxal bone |

| 25. | blanks next to each muscle p | the rovi | ered muscles in Figure 6–11 by placing the numbers if following muscle names. Then select a different coloded with a color-coding circle and color the coding commuscle in Figure 6–11. | r for |
|-----|---------------------------------|-------------|---|-------|
| | | 1. | Orbicularis oris | |
| | | 2. | Pectoralis major | |
| | O mil is auten | 3. | External oblique | |
| | 0 | 4. | Sternocleidomastoid | |
| | 0 | 5. | Biceps brachii | |
| | 0 | 6. | Deltoid | |
| | 0 | 7. | Vastus lateralis | |
| | 0 | 8. | Frontalis | |
| | 0 | 9. | Rectus femoris | |
| | \bigcirc | 10. | Sartorius | |
| | 0 | 11. | Gracilis | |
| | O | 12. | Adductor group | |
| | O | 13. | Fibularis longus | |
| | \circ | 14. | Temporalis | |
| | O | 15. | Orbicularis oculi | |
| | | 16. | Zygomaticus | |
| | \bigcirc | 17. | Masseter | |
| | \circ | 18. | Vastus medialis | |
| | \circ | 19. | Tibialis anterior | |
| | \bigcirc | 20 | Transversus abdominus | |

21. Rectus abdominis

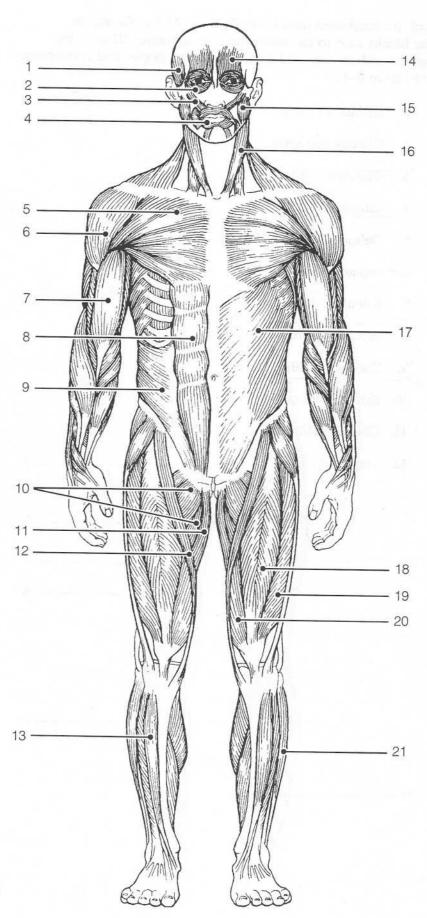


Figure 6-11

| numbers in the blanks next to the following muscle names. Then select different colors for each muscle and color the coding circles and corresponding muscles on Figure 6–12. | | | | |
|---|-----|------------------|--|--|
| O | 1. | Adductor muscle | | |
| O | 2. | Gluteus maximus | | |
| 0 | 3. | Gastrocnemius | | |
| \bigcirc | 4. | Latissimus dorsi | | |
| O | 5. | Deltoid | | |
| O | 6. | Semitendinosus | | |
| O | 7. | Soleus | | |
| O | 8. | Biceps femoris | | |
| O | 9. | Triceps brachii | | |
| O | 10. | External oblique | | |
| 0 | 11. | Gluteus medius | | |
| 0 | 12. | Trapezius | | |

