

NAME _____

DATE _____

SPMD 201 – Human Anatomy for Sports Medicine
Anatomy of the Muscular System
Chapter 10

Multiple Choice

- _____ 1. The brachioradialis is named for its:
- A. function and orientation.
 - B. origin and insertion.
 - C. location and size.
 - D. function and size.
- _____ 2. Which of the following muscle is named for its shape?
- A. pectoralis major
 - B. adductor magnus
 - C. vastus lateralis
 - D. trapezius
- _____ 3. The abdominal muscle that has its origin at the pubic crest and symphysis pubis is the:
- A. rectus abdominis.
 - B. transverse abdominis
 - C. external abdominal oblique.
 - D. internal abdominal oblique.
- _____ 4. Which of the following muscles moves the scapula?
- A. trapezius
 - B. biceps brachii
 - C. latissimus dorsi
 - D. pectoralis major
- _____ 5. The arm is attached to the thorax by the:
- A. pectoralis major and teres major.
 - B. supraspinatus and latissimus dorsi.
 - C. pectoralis minor and pectoralis major.
 - D. latissimus dorsi and pectoralis major.

- _____6. Which muscle is part of the rotator cuff?
- A. deltoid
 - B. teres major
 - C. infraspinatus
 - D. coracobrachialis
- _____7. The rotator cuff muscles:
- A. fix the scapula in place.
 - B. attach the arm to the thorax.
 - C. attach the scapula to the humerus.
 - D. hold the head of the humerus in the glenoid fossa.
- _____8. Teres minor is not involved in:
- A. extension of the arm.
 - B. adduction of the arm.
 - C. abduction of the arm.
 - D. lateral rotation of the arm.
- _____9. The anconeus works with the triceps brachii to:
- A. supinate the forearm.
 - B. extend the forearm.
 - C. pronate the forearm.
 - D. flex the forearm.
- _____10. The muscles of the anterior group of forearm muscles are primarily:
- A. flexors.
 - B. extensors.
 - C. abductors.
 - D. adductors.
- _____11. The radial pulse can be felt just lateral to the tendon of the _____.
- A. flexor carpi ulnaris
 - B. flexor carpi radialis
 - C. extensor carpi radialis brevis
 - D. extensor carpi radialis longus

- _____12. The thenar muscles are involved in controlling the _____; the hypothenar muscles control the _____.
- A. index finger; little finger
 - B. thumb; little finger
 - C. ring finger; thumb
 - D. thumb; index finger
- _____13. Which of the following is NOT a muscle of the “anatomical snuff box”?
- A. abductor pollicis brevis
 - B. abductor pollicis longus
 - C. extensor pollicis brevis
 - D. extensor pollicis longus
- _____14. The anterior group of forearm muscles MOSTLY have their origin on the:
- A. medial epicondyle of the humerus.
 - B. lateral epicondyle of the humerus.
 - C. distal portion of the radius.
 - D. distal portion of the ulna.
- _____15. Flexion of the thigh is a movement produced by the:
- A. gluteus medius and gluteus maximus.
 - B. gluteus maximus and vastus lateralis.
 - C. psoas major and iliacus.
 - D. sartorius and rectus abdominus.
- _____16. Which of the following is part of the quadriceps femoris group?
- A. pectineus
 - B. sartorius
 - C. vastus lateralis
 - D. tensor fascia latae
- _____17. The bulge of the calf is caused by the _____ muscle.
- A. sartorius
 - B. gastrocnemius
 - C. peroneus longus
 - D. extensor hallicus longus

- _____18. The term “shin splints” is applied to:
- A. injuries resulting from over-stretching the soleus.
 - B. stress fractures of the fibula 2-5 cm distal to the knee.
 - C. inflammation of gastrocnemius.
 - D. anterior compartment syndrome.
- _____19. Which of the following muscles is found in the lateral compartment of the leg?
- A. plantaris
 - B. tibialis anterior
 - C. peroneus longus
 - D. extensor digitorum longus
- _____20. If a nurse gives an injection in the lateral hip midway between the iliac crest and the head of the femur, the injection would be given into the:
- A. biceps femoris.
 - B. gluteus medius.
 - C. vastus lateralis.
 - D. gluteus maximus.
- _____21. “Wrist-drop” (the ability to extend the wrist and digits) may be caused by which of the following nerves?
- A. radial
 - B. ulnar
 - C. musculocutaneous
 - D. long thoracic
- _____22. The muscle which assists in flexion of the leg by *unlocking* the knee joint is:
- A. plantaris.
 - B. popliteus.
 - C. gastrocnemius.
 - D. soleus.
- _____23. When someone says they hit their “funny bone”, they are actually referring to which nerve?
- A. radial
 - B. ulnar
 - C. common fibular
 - D. ischiadic

- _____24. Injury to the long thoracic nerve would result in a condition known as:
- A. wrist drop.
 - B. Saturday night palsy
 - C. winged scapula
 - D. clawhand
- _____25. The condition known as “foot-drop” may result from which of the following?
- A. prolonged icing of the lateral knee
 - B. damage to the ischiadic nerve
 - C. inflammation of the piriformis muscle
 - D. all of the above

Alternate Choice

1. Biceps brachii pronates / supinates (circle one) the forearm.
2. Opponens digiti minimi is a thenar / hypothenar (circle one) muscle.
3. The palmar interossei muscles abduct / adduct (circle one) the fingers.
4. Adductor magnus extends / flexes / both (circle one) the thigh.
5. Abduction of the arm from 0-10° is accomplished by deltoid / supraspinatus (circle one).
6. The orientation of the oblique muscles of the abdomen can be represented by the hand in the pocket. The fingers sticking in the pocket represents the external / internal (circle one) obliques. [Fibers running inferiomedially.]
7. Sartorius is a medial / lateral (circle one) rotator of the thigh.
8. The superior gluteal / common peroneal (circle one) nerve is associated with “waddling gait.”
9. Severance of the ulnar nerve would result in “wrist-drop” / “claw hand” (circle one).
10. Upper / Lower / Both (circle one) trapezius upwardly rotate(s) the scapula.
11. Biceps brachii / femoris (circle one) flexes the leg.
12. There are three / four (circle one) dorsal interossei muscles.
13. The short head of biceps femoris moves the thigh / leg / both (circle one).

14. Coracobrachialis abducts / adducts (circle one) the arm.
15. Rhomboideus major and minor protract / retract (circle one) the scapula.
16. Pectoralis minor depresses / elevates (circle one) the scapula.
17. Latissimus dorsi laterally / medially/ both (circle one) rotates the humerus.
18. Pectoralis major extends / flexes / both (circle one) the arm.
19. “Winged scapula” involves paralysis of serratus anterior / infraspinatus (circle one).
20. Ulnar nerve entrapment would result in numbness of the lateral / medial (circle one) palm.
21. “Saturday night palsy” is caused by compression of the radial / ulnar (circle one) nerve.
22. The powerful push-off muscle in walking, jumping, and running is flexor digitorum / hallucis (circle one) longus.
23. Anconeus is located in the elbow / knee (circle one).
24. Opponens pollicis is a thenar / hypothenar (circle one) muscle.
25. Flexor digitorum profundus flexes the distal / proximal (circle one) 2nd and 5th phalanges.

Short Answer

1. LIST the motions of the scapula and the muscles that generate these movements.
2. LIST the muscles that flex the arm; extend the arm. Do any of these muscles perform both actions? If so, which?
3. EXPLAIN how pectoralis major and latissimus dorsi can have opposite actions in flexion/extension and abduction/adduction, yet share a similar action in rotation.
4. LIST the muscles that internally rotate the arm; externally rotate the arm.
5. LIST the muscles of the *anatomical snuff box*.
6. LIST the four (4) muscles that *extend* the leg.
7. LIST the three (3) criteria for membership in the “hamstring group.”

8. IDENTIFY which muscles are involved with performing:
- a chin-up
 - a push-up
 - a squat
 - a basketball free throw
9. Be able to identify the muscles from the checklist provided in class.

Multiple Choice

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|------|-------|-------|-------|-------|
| 1. B | 6. C | 11. B | 16. C | 21. A |
| 2. D | 7. D | 12. B | 17. B | 22. B |
| 3. A | 8. C | 13. A | 18. D | 23. B |
| 4. A | 9. B | 14. A | 19. C | 24. C |
| 5. D | 10. A | 15. C | 20. B | 25. D |

Alternate Choice

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|---------------------|-----------------------|--------------|
| 1. pronates | 11. femoris | 21. radial |
| 2. hypothenar | 12. four | 22. hallucis |
| 3. adduct | 13. leg | 23. elbow |
| 4. both | 14. adducts | 24. thenar |
| 5. supraspinatus | 15. retract | 25. distal |
| 6. external | 16. depresses | |
| 7. lateral | 17. medially | |
| 8. superior gluteal | 18. both | |
| 9. "clawhand" | 19. serratus anterior | |
| 10. both | 20. medial | |