

010 Chapter 10

Student: _____

1. Several body orifices are regulated by circular muscles called ____.

2. Muscle fibers are arranged in bundles called ____.

3. A muscle that prevents unwanted movement of a bone is called a ____.

4. The muscle of the lips is the ____.

5. The prime mover of neck flexion is a prominent muscle on the side of the neck called the ____.

6. In a ____ muscle, the fascicles diverge from both sides of a central tendon.

7. The largest muscle of the upper back is the ____.

8. The linea alba separates the right and left ____ muscles from each other.

9. The hamstring muscles are the semimembranosus, semitendinosus, and ____.

10. The anterior aspect of the thigh is dominated by the ____, a large muscle with four heads.

11. All skeletal muscles have their origins and insertions on bone.

True False

12. The levator palpebrae is an antagonist of the orbicularis oris.

True False

13. The little finger is extended by both the extensor digitorum and the extensor digiti minimi.

True False

14. Both the hand and the foot have lumbrical and interosseous muscles.

True False

15. Each muscle fiber is surrounded by its own connective tissue sheath called the perineurium.

True False

16. The bone at a muscle's origin shows little or no movement when that muscle contracts.

True False

17. The interosseous muscles are fusiform.

True False

18. The actions of a synergist are similar but not necessarily identical to those of a prime mover at the same joint.

True False

19. The pelvic diaphragm is deeper than the urogenital diaphragm.

True False

20. Fusiform muscles are generally weaker than parallel muscles because they have a narrower tendon at the insertion.

True False

21. An antagonist is a muscle that generally acts to prevent movement of a bone.

True False

22. The orbicularis oculi moves the eye, for example when you are reading a page of print.

True False

23. When you swallow, you can feel your larynx bob upwards. This results from the action of certain muscles in the infrahyoid group.

True False

24. Raising the thumb to a hitchhiking position employs the adductor pollicis.

True False

25. Contraction of the diaphragm expels air from the lungs.

True False

Match the following terms to the definitions.

adductor pollicis	anal triangle
antagonist	aponeurosis
belly	biceps femoris
brachialis	bursa
deep transverse perineus	external urethral sphincter
fascicle	head
interosseous membrane	ischiocavernosus
palmaris longus	pelvic diaphragm
prime mover	psoas major
retinaculum	synergist
triceps brachii	urogenital triangle
vastus lateralis	

26. A broad flat tendon is known as the _____.

27. Muscle that produces the main force in a given joint action is known as the _____.

28. Antagonist of the rectus femoris is known as the _____.

29. Synergist of the biceps brachii is known as the _____.

30. The _____ forms a web between the thumb and the palm.

31. Connective tissue band that holds down tendons at the wrist or ankle are known as the _____.

32. Prominent muscle that extends from the lumbar vertebrae to the femur is known as the _____.

33. Helps to void urine is known as the _____.

34. Anterior half of the perineum is known as the _____.

35. Thick middle part of a muscle is known as the _____.

36. ___ are straplike muscles of uniform width whose fascicles all run in the same direction.

- A. Convergent muscles
- B. Pennate muscles
- C. Rectilinear muscles
- D. Fusiform muscles
- E. Parallel muscles

37. A/an ___ muscle of the hand has both its origin and insertion within the hand.

- A. internal
- B. synergistic
- C. convergent
- D. extrinsic
- E. intrinsic

38. A smile is produced by contraction of the ____ muscle(s).
- A. frontalis
 - B. zygomaticus
 - C. depressor anguli oris
 - D. orbicularis oris
 - E. orbicularis oris
39. The ____ muscles pull the skin of the chin upward.
- A. depressor anguli oris
 - B. mentalis
 - C. depressor labii inferioris
 - D. platysma
 - E. masseter
40. All of the following are intrinsic muscles of the head except
- A. the temporalis.
 - B. the epicranium.
 - C. the sternocleidomastoid.
 - D. the risorius.
 - E. the nasalis.
41. All of the following produce chewing movements of the mandible except
- A. the masseter.
 - B. the medial pterygoid.
 - C. the lateral pterygoid.
 - D. the thyrohyoid.
 - E. the mylohyoid.
42. Which of the following is an extensor of the neck?
- A. posterior scalene
 - B. semispinalis capitis
 - C. sternocleidomastoid
 - D. occipitalis
 - E. omohyoid

43. The word hallucis in the name of a muscle pertains to
- A. the great toe.
 - B. the thumb.
 - C. the ankle.
 - D. the wrist.
 - E. the mind.
44. The deepest muscle of the abdominal wall is
- A. the transversus abdominis.
 - B. the internal oblique.
 - C. the rectus abdominis.
 - D. the erector spinae.
 - E. the latissimus dorsi.
45. The pronator teres and pronator quadratus
- A. depress the scapula.
 - B. rotate the scapula.
 - C. flex the elbow.
 - D. turn the palm upward.
 - E. turn the palm downward.
46. The two prominent superficial tendons at the wrist belong to the ____ muscle(s).
- A. semitendinosus and semimembranosus
 - B. palmaris longus and flexor carpi ulnaris
 - C. flexor retinaculum and extensor retinaculum
 - D. flexor digitorum superficialis
 - E. extensor digitorum and extensor pollicis brevis
47. All of the following belong to the triceps surae of the calf except
- A. the plantaris muscle.
 - B. the soleus muscle.
 - C. the tibialis posterior muscle.
 - D. the calcaneal tendon.
 - E. the gastrocnemius muscle.

48. Which of the following is not an infrahyoid muscle?
- A. sternothyroid
 - B. sternohyoid
 - C. mylohyoid
 - D. omohyoid
 - E. thyrohyoid
49. Which one of these muscles helps to open the mouth (depress the mandible)?
- A. zygomaticus major
 - B. digastric
 - C. sternohyoid
 - D. depressor anguli oris
 - E. mentalis
50. The ___ acts synergistically with the masseter to elevate the mandible.
- A. levator scapulae
 - B. splenius capitis
 - C. buccinator
 - D. zygomaticus major
 - E. temporalis
51. The ___ originates on the zygomatic arch and inserts on the angle of the mandible.
- A. masseter
 - B. buccinator
 - C. temporalis
 - D. genioglossus
 - E. zygomaticus major
52. Which of the following is not a muscle of the lower extremity?
- A. sartorius
 - B. adductor magnus
 - C. pectineus
 - D. semitendinosus
 - E. flexor carpi ulnaris

53. Which of the following muscles is not below the knee?

- A. flexor digitorum brevis
- B. psoas major
- C. abductor hallucis
- D. peroneus longus
- E. soleus

54. The prominent tendons you can palpate at the popliteal fossa arise from

- A. the biceps brachii.
- B. the triceps brachii.
- C. the hamstring muscles.
- D. the quadriceps femoris.
- E. the gastrocnemius.

55. Crossing your legs while sitting employs mainly

- A. the sartorius.
- B. the superior gemellus.
- C. the piriformis.
- D. the pectineus.
- E. the bulbocavernosus.

56. Which of the following muscles is not externally visible on the trunk of the body?

- A. latissimus dorsi
- B. teres major
- C. transversus abdominis
- D. trapezius
- E. pectoralis major

57. The longest muscle of the human body is

- A. the sartorius.
- B. the ischiocavernosus.
- C. the gastrocnemius.
- D. the superior rectus.
- E. the triceps brachii.

58. The calcaneal (Achilles) tendon arises from
- A. the gastrocnemius and soleus.
 - B. the peroneus longus and peroneus brevis.
 - C. the lateral rotator muscles.
 - D. the semitendinosus and semimembranosus.
 - E. the adductor longus, adductor brevis, and adductor magnus.
59. Which of the following muscles does not insert on the tibia or fibula?
- A. tibialis anterior
 - B. rectus femoris
 - C. biceps femoris
 - D. vastus medialis
 - E. semimembranosus
60. Which of the following is not a muscle of the buttocks?
- A. tensor fasciae latae
 - B. lateral rotators
 - C. vastus intermedius
 - D. gluteus maximus
 - E. gluteus minimus
61. You have just played a stunning violin concerto, the audience is wild with applause, and you take a deep bow, using your
- A. gluteus maximus muscles.
 - B. iliopsoas muscles.
 - C. extensor hallucis longus muscles.
 - D. dorsal interosseous muscles.
 - E. lumbrical muscles.
62. Which of the following flexes the thigh?
- A. vastus lateralis
 - B. vastus medialis
 - C. semimembranosus
 - D. rectus femoris
 - E. biceps femoris

63. The quadriceps femoris includes all of the following muscles parts except
- A. the vastus medialis.
 - B. the rectus femoris.
 - C. the vastus intermedius.
 - D. the vastus femoris.
 - E. the vastus lateralis.
64. The ___ is one of the hamstring muscles on the posterior side of the thigh.
- A. semimembranosus
 - B. adductor magnus
 - C. gluteus minimus
 - D. ischiocavernosus
 - E. tensor fasciae latae
65. Which of the following muscles produces plantar flexion of the foot?
- A. tibialis anterior
 - B. soleus
 - C. plantaris
 - D. flexor digitorum brevis
 - E. quadratus plantae
66. The teres major and teres minor originate on the ___ and insert on the ___.
- A. humerus; scapula
 - B. scapula; humerus
 - C. os coxae; femur
 - D. femur; tibia
 - E. tibia; calcaneus and talus
67. Tendinous insertions divide the ___ into segments externally visible on the abdomen of a well-muscled person.
- A. vastus lateralis
 - B. biceps brachii
 - C. quadriceps femoris
 - D. serratus anterior
 - E. rectus abdominis

68. When you hyperextend your fingers, as in admiring a ring, you may be able to see three or four prominent tendons stand out on the back of your hand. These tendons arise from
- A. the flexor digitorum superficialis.
 - B. the flexor digitorum profundus.
 - C. the lumbrical muscles.
 - D. the extensor digitorum.
 - E. the dorsal interossei.
69. Suppose you were doing toe-touching exercises, without bending your knees. Each time you stood up, you would be using
- A. the iliocostalis muscles.
 - B. the quadratus femoris muscles.
 - C. the gastrocnemius muscles.
 - D. the rectus abdominis muscles.
 - E. the gluteus medius and minimus muscles.
70. Which of the following perineal muscles exhibits the greatest difference between males and females?
- A. the bulbospongiosus
 - B. the deep transverse perineus
 - C. the levator ani
 - D. the coccygeus
 - E. the external anal sphincter
71. Which of the following muscles is bipennate?
- A. the pectoralis major
 - B. the biceps brachii
 - C. the rectus femoris
 - D. the palmar interosseous muscles
 - E. the deltoid

72. In skeletal muscle, groups of muscle cells are called _____ and are surrounded by a connective tissue sheath called the _____.
- A. fascicles, endomysium
 - B. fascicles, perimysium
 - C. fasciae, epimysium
 - D. fasciae, endomysium
 - E. fascicles, epimysium
73. The biceps brachii is connected to the scapula by collagenous fibers of the epimysium called the _____, and this attachment represents the _____ of the biceps brachii.
- A. aponeurosis; origin
 - B. indirect attachment; insertion
 - C. tendon; origin
 - D. tendon; insertion
 - E. aponeurosis; insertion
74. The rectus abdominis is a(n) _____ muscle, while the rectus femoris is a(n) _____ muscle.
- A. fusiform; parallel
 - B. parallel; bipennate
 - C. circular; multipennate
 - D. convergent; unipennate
 - E. bipennate; parallel
75. Which one of the following muscles would exert the greatest tension on its insertion?
- A. biceps brachii
 - B. rectus abdominis
 - C. pectoralis major
 - D. orbicularis oculi
 - E. brachioradialis
76. Which of the following muscles are not part of the rotator cuff?
- A. subscapularis
 - B. infraspinatus
 - C. supraspinatus
 - D. teres minor
 - E. teres major

77. The extensor carpi ulnaris is an example of what type of muscle?
- A. intrinsic
 - B. extrinsic
 - C. synergist
 - D. fixator
 - E. antagonist
78. Lumborum means _____, while brachii means _____.
- A. of the thorax; of the fibula
 - B. of the lower back; of the arm
 - C. of the thorax; of the thumb
 - D. of the chest; of the great toe
 - E. of the lower back; of the hand
79. You are trying to find the flexor digitorum profundus. You are looking for a muscle that
- A. flexes the toes and is large.
 - B. flexes the fingers and is close to the skin.
 - C. flexes the fingers or toes and is deep.
 - D. rotates the toes and is large.
 - E. flexes the leg and is small.
80. You are looking for the flexor hallucis brevis. This muscle
- A. flexes the thumb briefly.
 - B. flexes the index finger and is short.
 - C. flexes the little toe and is short.
 - D. flexes the great toe and is short.
 - E. flexes the ring finger and is short.
81. The frontalis muscle is connected to the occipitalis muscle by a(an)
- A. deep fascia.
 - B. tendon.
 - C. aponeurosis.
 - D. flat, thin muscle.
 - E. ligament.

82. The muscles of the cheek, which function in blowing, sucking, and chewing, are called the _____ muscles.
- A. buccinator
 - B. masseter
 - C. orbicularis oris
 - D. zygomaticus major
 - E. zygomaticus minor
83. The two powerful muscles, which elevate your mandible to bite and chew, are the
- A. masseter and buccinator.
 - B. zygomaticus major and minor.
 - C. temporalis and masseter.
 - D. depressor labii inferioris and depressor anguli oris.
 - E. buccinator and temporalis.
84. This muscle, which is named for its origin and insertion, elevates the hyoid bone.
- A. stylohyoid
 - B. omohyoid
 - C. sternohyoid
 - D. thyrohyoid
 - E. sternothyroid
85. The principle flexors of the neck are the
- A. sternocleidomastoid and trapezius.
 - B. scalenus and trapezius.
 - C. splenius capitis and sternocleidomastoid.
 - D. sternocleidomastoid and scalenus.
 - E. sternocleidomastoid and platysma.
86. The muscular dome between the abdominal and thoracic cavity is the
- A. central tendon.
 - B. diaphragm.
 - C. external intercostals.
 - D. internal intercostals.
 - E. transverse abdominis.

87. Which of the following muscles flexes the vertebral column?

- A. longissimus
- B. transverse abdominis
- C. iliocostalis
- D. rectus abdominis
- E. spinalis

88. Identify the muscle that you can see originates on the iliac crest and inserts on lumbar vertebrae and rib 12.

- A. multifidus
- B. quadratus lumborum
- C. erector spinae
- D. splenius
- E. longissimus

89. Identify the muscle group which extends and rotates the vertebral column.

- A. serratus posterior
- B. quadratus lumborum
- C. multifidus
- D. iliocostalis
- E. longissimus

90. Your hamstring muscles, gluteus maximus, and erector spinae are contracting in the sequence listed. You are most likely

- A. straightening up after touching your toes.
- B. standing up from sitting in a chair.
- C. turning over in a lying position.
- D. climbing up stairs.
- E. bending to touch your toes.

91. In males, this muscle forms a sheath around the base of the penis and expels semen during ejaculation. In females, this same muscle encloses the vagina and tightens on the penis during intercourse. This muscle is the
- A. ischiocavernosus.
 - B. superficial transverse perineus.
 - C. levator ani.
 - D. bulbospongiosus.
 - E. cremaster.
92. The muscles that laterally rotate and depress the scapula, as in shrugging and lowering the shoulders, are the
- A. trapezius and serratus anterior.
 - B. pectoralis minor and serratus anterior.
 - C. levator scapulae and rhomboideus muscles.
 - D. trapezius and rhomboideus muscles.
 - E. levator scapulae and pectoralis major.
93. The four rotator cuff muscles are examples of
- A. prime movers.
 - B. antagonists.
 - C. synergists.
 - D. fixators.
 - E. medial rotators.
94. The principle flexors of the forearm are the
- A. biceps brachii and coracobrachialis.
 - B. brachioradialis and brachialis.
 - C. subscapularis and coracobrachialis.
 - D. biceps brachii and brachialis.
 - E. biceps brachii and triceps brachii.

95. On the posterior side of the hand you can notice four tendon sheaths around four tendons attaching to all of your digits except the thumb. These tendons all come from the same muscle called the
- A. extensor carpi ulnaris.
 - B. extensor digiti minimi.
 - C. extensor carpi radialis.
 - D. extensor digitorum.
 - E. extensor pollicis.
96. This large muscle originates on the ilium and sacrum, inserts on the distal femur and its action is to extend the thigh.
- A. gluteus maximus
 - B. tensor fasciae latae
 - C. psoas major
 - D. iliacus
 - E. gluteus minimus
97. Which one of the following is not part of the quadriceps muscle group?
- A. vastus medialis
 - B. vastus lateralis
 - C. vastus intermedius
 - D. biceps femoris
 - E. rectus femoris
98. If the calcaneal (Achilles) tendon was cut, which muscle action would be affected the most?
- A. dorsiflexion
 - B. plantarflexion
 - C. inversion
 - D. eversion
 - E. leg extension
99. The extensor digitorum longus, extensor hallucis longus, fibularis tertius, and tibialis anterior
- A. dorsiflex the foot.
 - B. plantar flex the foot.
 - C. invert the foot.
 - D. evert the foot.
 - E. extend the leg.

100. Skeletal muscle contractions help move

- A. blood through the heart.
- B. blood through arteries.
- C. blood through veins.
- D. food through the GI tract.
- E. urine through the ureters.

010 Chapter 10 Key

1. sphincters
2. fascicles
3. fixator
4. orbicularis oris
5. sternocleidomastoid
6. bipennate
7. trapezius
8. rectus abdominis
9. biceps femoris
10. quadriceps femoris
11. FALSE
12. TRUE
13. TRUE
14. TRUE
15. FALSE
16. TRUE
17. FALSE
18. TRUE
19. TRUE
20. FALSE
21. FALSE

22. FALSE
23. TRUE
24. FALSE
25. TRUE
26. aponeurosis
27. prime mover
28. biceps femoris
29. brachialis
30. adductor pollicis
31. retinaculum
32. psoas major
33. deep transverse perineus
34. urogenital triangle
35. belly
36. E
37. E
38. B
39. B
40. C
41. D
42. B
43. A

44. A

45. E

46. B

47. C

48. C

49. B

50. E

51. A

52. E

53. B

54. C

55. A

56. C

57. A

58. A

59. A

60. C

61. B

62. D

63. D

64. A

65. B

66. B

67. E

68. D

69. A

70. A

71. C

72. B

73. C

74. B

75. C

76. E

77. B

78. B

79. C

80. D

81. C

82. A

83. C

84. A

85. D

86. B

87. D

88. B

89. C

90. A

91. D

92. A

93. C

94. D

95. D

96. A

97. D

98. B

99. A

100. C