**Chapter 9 Quiz 1**

1. Which part of the sarcomere in a contracted muscle decreases in size (or may disappear completely)?
   1. A bands only
   2. H zones and I bands
   3. Z lines only
   4. A and Z bands
   5. A and I bands
2. Which muscle type(s) can be accurately described as visceral, nonstriated and involuntary?
   1. smooth
   2. skeletal
   3. cardiac
   4. both cardiac and skeletal
   5. both cardiac and smooth
3. The connective tissue covering of a fascicle is known as
   1. endomysium.
   2. perimysium.
   3. tendon.
   4. epimysium.
   5. deep fascia.
4. The A band in a muscle appears \_\_\_\_\_\_\_\_\_\_ and contains \_\_\_\_\_\_\_\_\_\_.
   1. dark, both thick and thin myofilaments
   2. dark, thin myofilaments
   3. light, thick myofilaments
   4. light, thin myofilaments
   5. dark, thick myofilaments
5. Thick myofilaments are composed of
   1. myosin.
   2. actin, troponin, and tropomyosin.
   3. myosin, troponin, and tropomyosin.
   4. actin.
   5. myosin and actin.
6. Which disease results in muscle weakness due to a lack of neurotransmitter receptors?
   1. musclat dystrophy
   2. intermittent claudication
   3. myasthenia gravis
   4. tetanus
   5. firbomyositis
7. When athletes warm up, they illustrate a(n) \_\_\_\_\_\_\_\_\_\_ type of muscle contraction.
   1. isotonic
   2. isometric
   3. twitch
   4. tetanus
   5. treppe
8. Lactic acid is produced
   1. in rested muscles with plentiful oxygen.
   2. in cardiac muscles only.
   3. in fatigued muscles with a shortage of oxygen.
   4. in fatigued muscles with plentiful oxygen.
   5. in rested muscles with a shortage of oxygen.
9. Which statement best reflects slow, oxidative skeletal-muscle fibers?
   1. Slow to fatigue and red in color.
   2. Slow to fatigue and white in color.
   3. Fast to fatigue and pink in color.
   4. Fast to fatigue and white in color.
   5. Fast to fatigue and red in color.
10. Which choice below indicates the proper order in decreasing size?
    1. muscle, fascicle, muscle fiber, myofibril
    2. muscle, muscle fiber, fascicle, myofibril
    3. muscle, fascicle, myofibril, muscle fiber
    4. fascicle, muscle, muscle fiber, myofibril
    5. muscle, myofibril, fascicle, muscle fiber
11. Which of the following steps in muscle contraction would occur first?
    1. sarcolemma develops an action potential
    2. binding sites exposed on actin
    3. filaments slide by each other
    4. calcium is released
    5. T-tubules transmit message throughout the cell
12. A continuous, sustained contraction that shows no relaxation is called
    1. complete tetanus.
    2. twitch.
    3. incomplete tetanus.
    4. wave summation.
    5. treppe.
13. Which statement best represents skeletal muscle?
    1. Multinucleate, with rhythmic contractions and a pacemaker.
    2. Uninucleate, with rhythmic contractions but no pacemaker.
    3. Multinucleate, with rhythmic contractions but no pacemaker.
    4. Multinucleate, with rhythmic contractions or a pacemaker.
    5. Uninucleate, with rhythmic contractions or a pacemaker.
14. Calcium is stored and released in skeletal muscle by the
    1. sarcolemma.
    2. sarcoplasmic reticulum.
    3. T-tubules.
    4. caveoli.
    5. myofilaments.
15. Which statement is correct about the origin of a muscle?
    1. It is the movable bone and less proximal than the insertion.
    2. It is the immovable bone and more proximal than the insertion.
    3. It is always attached to an aponeurosis.
    4. It is the movable bone and more proximal than the insertion.
    5. It is the immovable bone and less proximal than the insertion.

Answer key:

1. b 2. a 3. b 4. a 5. a 6. c 7. e

8. c 9. a 10. a 11. a 12. a 13. d 14. b

15. b