Chapter 6 - The Muscular System

1) Which junction represents the connection between the tip of a neuron and a skeletal muscle cell from which acetylcholine diffuses?

2) Which functions in the attachment of muscle to bone?

3) When a muscle is stimulated before the muscle can fully relax, this can cause __________.

4) What delivers a signal from the motor neuron to all the sarcomeres of a muscle cell?

5) The sarcoplasmic reticulum stores ions that are necessary for skeletal muscle contractions. Which ion does it store?

6) The attachment point of a muscle to a bone that can move is called the __________.

7) Which of the following is not a function of muscle?
   1. Move lymph in lymphatic vessels
   2. Generate heat
   3. Move blood in veins
   4. Aid in movement of the body
   5. Protect internal organs
   6. Regulate calcium in the blood

8) A condition that occurs when a myosin head binds to an actin molecule in order to contract a muscle is ____________.

9) Which muscle cells are designed for endurance?

10) Which cell type can be described as muscle cells that contract rapidly, are rich in glycogen deposits, and depend on anaerobic respiration to produce ATP?

11) Which muscle type contains numerous gap junctions?

12) When a muscle is stimulated prior to full relaxation of a previous contraction and the second stimuli is added to the first contraction, it is referred to as ____________.

13) What is released by motor neurons to stimulate a contraction?

14) Which component of a muscle does the Ca++ combine with to allow a contraction to occur?

15) Why is ATP needed for muscle contraction?

16) If it were possible to have antagonistic muscle pairs in an arm contract simultaneously, what movement would the arm make?
17) When a muscle cramps, it is often due to dehydration. Why would stretching or massaging it relieve the condition?