

Name: _____

Date: _____

Muscular System Independent Review

1. What are the two main functions of the muscle system?

2. Fill in the chart for the muscle tissue.

Muscle Type	Trait		
	What does it look like? (Striations? How many nuclei?)	How is it controlled? Voluntarily or Involuntarily	Where is it found? (Location on the body)

3. Which way do striations go? Draw out and label each.

4. With regards to the size of the muscle, write out the sizes of the girth and length of our muscles.

5. Location of the muscle on the body.

a. flexor carpi radialis: _____

c. tibialis anterior: _____

b. quadriceps femoris: _____

d. pectoralis major: _____

6. How many times does the muscle attach at the origin?

a. biceps: _____

b. triceps: _____

c. quadriceps: _____

7. What is the general shape of the muscle? Write out the two muscle shapes.

8. Physiology of a muscle.

- a. muscle cell: _____
- b. muscle fiber: _____
- c. muscle fibers are packed with what types of protein: _____
- d. the cover membrane of a muscle cell: _____
- e. bundle of cells in your muscle: _____

9. Muscles always attach to bones in at least TWO locations. What are these? Define them.

10. In what direction does a muscle contract? _____

11. Muscles contractions: Involving an influx of _____, the conversion of _____ to _____ (which provides _____ for a muscle to contract).

An associated nerve stimulates a chemical called _____ (transmit signals from a _____), specifically, _____ (which is the specific neurotransmitter for muscle contraction as well as memory and learning) which causes the muscle fibers to pull in _____ ions into the muscle cell, which creates a strange charge called an _____.

The positive nature of the action potential causes it to travel down the fibers of the muscle from origin to insertion. The contract must complete itself once it has started.

12. Muscle movement

Flexion:

Extension:

Abduction:

Adduction:

Rotation:

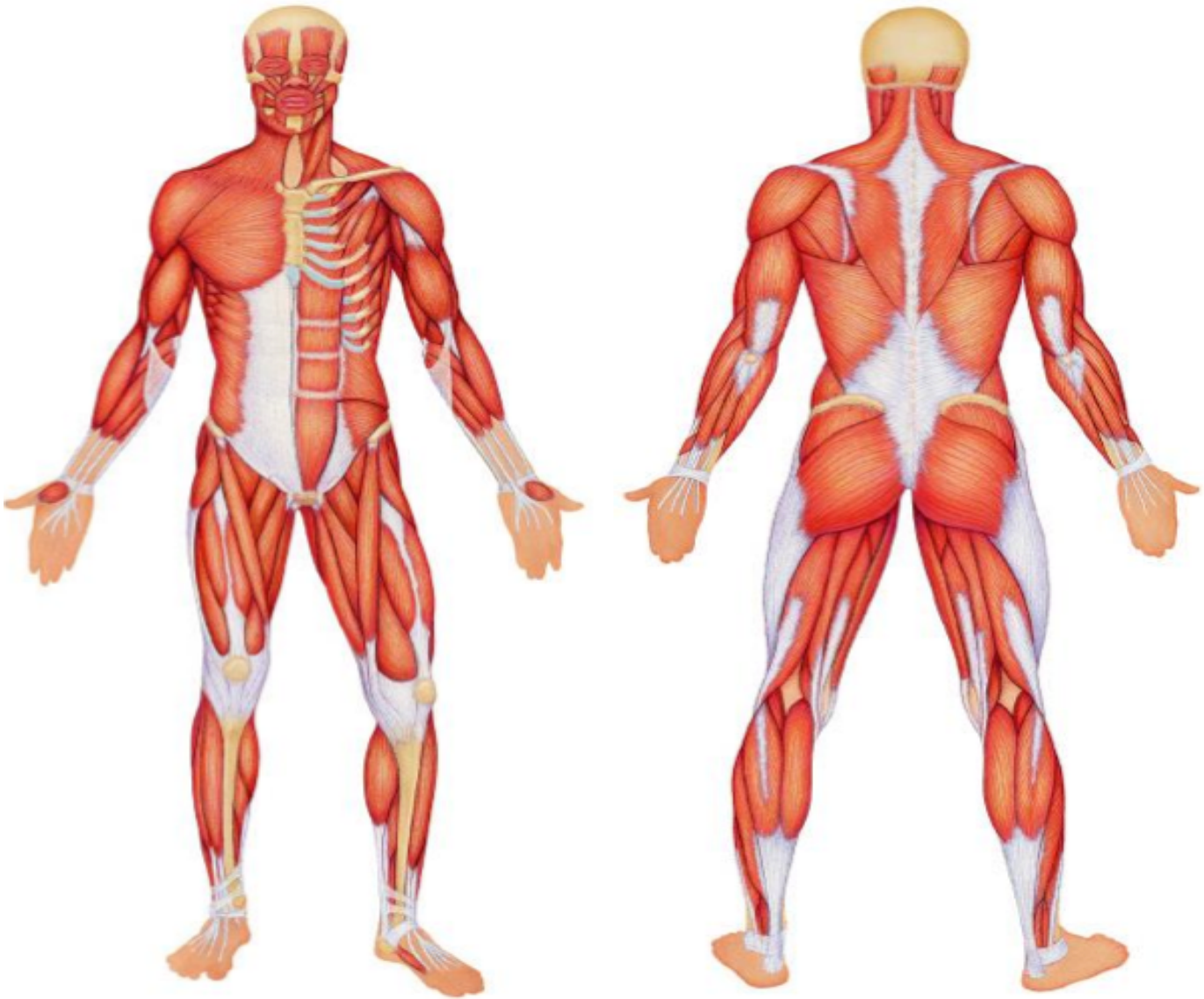
Elevation:

Depression:

13. Trivia!!!

- a. how many muscles are there in the human body? _____
- b. what's the biggest muscle of the body? _____
- c. what is the longest? _____
- d. how about the strongest muscle? _____

Label the muscles below.



Muscular Pathologies

14. What is cramping? _____

15. What could cause cramping? _____

16. Muscular dystrophy is a _____ disorder? What does it do to the body? _____

17. What causes tetanus? _____

18. How does ALS affect the body?

19. What is an autoimmune disorder?

20. What is fibromyalgia?