MQ - Basic Muscle Function Name:

1. What neurochemical transmitter eventually triggers muscle contraction once released into the synaptic cleft?
2. Adrenaline
3. ACH
4. Troponin
5. Tropomyosin

2. Which of the following is the smallest functional unit of the muscles?

1. Actin
2. Muscle tissue
3. Fasicle
4. T-tubule

3. What ion is in high concentration in the synaptic cleft?

1. Potassium
2. Calcium
3. Phosphorus
4. Sodium

4. Eventually, the t-tubule dumps \_\_\_\_ into the sarcomere.

1. Potassium
2. Calcium
3. Phosphorus
4. Sodium

5. What is the energy currency for the cell (i.e. what must be present in order for myosin heads to change shape)?

1. ATP
2. Calcium
3. Troponin
4. Tropomyosin

6. Which inhibits the myosin head from binding to the actin sub-unit?

1. Tropomyosin
2. Calcium
3. Potassium
4. Myofibrils

7. Which of the following is not one of the major role players in muscle contraction?

1. Potassium
2. Calcium
3. Phosphorous
4. ATP
5. ACH
6. Sodium

8. T/F: A contracting muscle cell is electrically charged.

1. True
2. False

9. What is responsible for re-establishing the chemistry during the relaxed state (when muscles are not contracting)?

A. Ca pump

B. Melatonin

C. NaK pump

D. ACH

10. Calcium readily binds to…

A. ACH

B. troponin

C. Actin

D. Myosin heads

11. Name one way that muscle contraction regulation is interrupted.