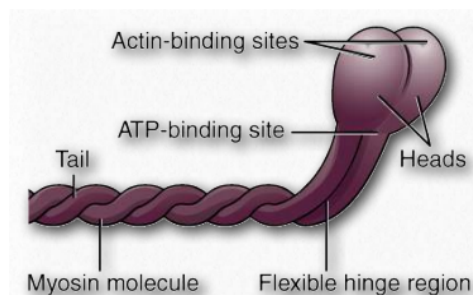


Wednesday 04/03 Worksheet

1. Identify the role of each neurotransmitter in regards to the neuromuscular junction (hint: inhibits or stimulates?)
 - a. Acetylcholine:
 - b. Acetylcholinesterase:
 - c. Acetylcholinesterase inhibitor:
2. What is excitation-contraction coupling time?
3. Define the following terms:
 - a. Myofilament:
 - b. Sarcoplasm:
 - c. Sarcolemma:
 - d. Sarcoplasmic reticulum:
4. If skeletal muscle is exposed to enough trauma to experience cell death, is it likely to heal at all, partially, or entirely?
5. Describe the basic structure of myosin and how it assembles to make up a thick filament.
(HINT: Describe the shape and winding)



6. Understand the arrangement of the troponin complex, tropomyosin, and actin polymers, and their arrangement in the assemblage of the thin filament.
7. If a sarcomere fully contracts, how far in its contraction can it go, and why can it go no further? What state is this maximally compressed polypeptide said to be in?

8. What is myasthenia gravis, what type of disease is it, and what goes wrong when one has this disease?
9. What is curare, where does it come from and who first discovered a use for it? What was its use?
10. Pharmacologically, what is an antagonist and how does curare mode of action fit the definition of an antagonist?