

Name _____

Go here to complete the worksheet (the link is also on my webpage):

highered.mheducation.com/sites/0073525707/student_view0/chapter9/sarcomere_shortening.html

1. When a muscle is relaxed, actin and myosin lie side by side and the _____ and _____ are at maximum width.
2. When a muscle contracts, the actin and myosin myofilaments interact. The _____ slide towards the center of each _____. As a result the sarcomere will _____.
3. When a muscle is fully contracted, the ends of the _____ overlap, the _____ disappears and the _____ becomes very narrow.

Fill in the following questions based on pages 131 in your textbook.

Skeletal Muscle Contraction

1. Muscle fibers are stimulated to contract by _____.
2. The connection from the motor neuron to the sarcolemma results in a small gap called a synaptic cleft. The region itself where the connection between the neuron and muscle fiber happens is called a _____.
3. The specific neurotransmitter chemical that is released into the synaptic cleft when signaled is called _____. This chemical helps create a connection from the receptors to the sarcolemma.

4. Now, the sarcolemma generates signals that spread over the sarcolemma and down the _____ to the _____.
5. Stored _____ is released from the sarcoplasmic reticulum.
6. When the ions are released, it causes actin and myosin to slide past one another resulting in muscle _____.