Muscle Worksheet 3

ANS 214 SI

Fill in the blank:

1) A sarcomere stretches from _______________ to ________________.

2) Ca 2+ binds to _______________ which moves _______________ from the active site.

3) The removal of ADP and Pi leads to _________________.

4) The products of Glycolysis without oxygen are _______________ and _______________.

Multiple choice:

1) The center line of a section of muscle is called
   a) Z-disk
   b) A band
   c) M line
   d) I band

2) What is the name of the process that starts with binding of Actin and myosin?
   a) Relaxation
   b) Cocking of the myosin head
   c) Latint
   d) The cross bridge cycle

3) What is the name of the enzyme that removes ACH from the synapse?
   a) Acetylcholinesterase
   b) Deoxyribonucleic acid
   c) Cholecystokinin
   d) Cholesterol

4) Which of these does not use ATP?
   a) Detachment of the myosin head
   b) Flow of K+ out of the Axon
   c) Pump Ca2+ into SR
   d) Pump of K+ and Na+ into original positions
5) Which is the most effective way of getting ATP?
   a) Anaerobically
   b) Direct phosphorylation
   c) Aerobically
   d) Muscle stores

*Short answer:*

1) What are the different parts of a sarcomere?

2) What are the steps of contraction? (hint: the cross bridge cycle)

3) What are the steps of Relaxation?

4) What are the ways our muscles create oxygen? How are they different? How effective is each?