Acetylcholine is released into the synaptic cleft

Action potential travels throughout sarcolemma

Calcium from the sarcoplasmic reticulum is released into the myofibrils

Calcium ions enter the axon terminal

Contraction occurs when ATP is hydrolyzed

Movement of ions in and out of the muscle cell creates a voltage change at the sarcolemma

 Myosin heads form cross bridges with actin filaments

Nerve impulse is sent down the axon of the motor neuron

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Nerve impulse is sent down the axon of the motor neuron

Step two.

Create a flow chart using every single one of these words at least once (sometimes more)

Nerve impulse

Axon

Motor neuron

Calcium ions

Axon terminal

Synaptic cleft

Acetylcholine

Sarcolemma

Action potential

Voltage change

Sarcoplasmic reticulum

Myofibrits

Actin

Myosit

Cross-bridges

ATP

Contraction

Three

Venn diagram word bank

Requires oxygen

Synthesizes ATP

Makes only 1 ATP per reaction

Makes only 2 ATP per reaction

Produces lactic acid as a byproduct

Breaks down glucose

Does not require oxygen

Makes 32 ATP per reaction

Produces byproducts of Carbon Dioxide

Can provide ATP for hours when provided enough reactants

Can provide ATP only for about 15 seconds

Can provide ATP for about 40 seconds

Happens in mitochondria

Only in muscle fibers

Which process is the most efficient use of glucose?

Which Process takes the longest?

Which process will your body use all the time if not overtaxed?

Which processes are the “back-up” plans to be used when the muscles are overtaxed?

Why is it important to have a variety of ways for the body to supply ATP to the muscle fibers?