Chapter 8 Worksheet: The Muscular System

What are the three types of muscle and their features?

What are the five functions of muscle tissue?

Please list from deep to superficial the connective tissue coverings of muscle.

Why are skeletal muscles supplied with nerves and a blood supply?

Please label the diagram below using Z disc, H zone, I band, A band, Thick filament, Thin filament

What proteins are present in the thick and thin filaments?

What happens to the I bands as muscles contract?

Do the lengths of the thick and thin filaments change during contractions?

What is a sarcomere?

What happens during muscular atrophy?

Contraction and Relaxation of Skeletal Muscle
What is released from the synaptic end bulb?
Does the nerve touch the muscle fibers?
What is ACh?
How is it broken down?
Where is the motor end plate?
What are the steps that occur at the neuromuscular junction? (p. 178)

How does a muscle contraction occur?

What structure holds calcium ions to be released into the sarcoplasm during contraction?

What are the steps that occur during a contraction? (p. 179)

How does relaxation occur?

Please label the diagram based on the information on pg. 181.
Metabolism of Skeletal Muscle Tissue

What are the three sources for ATP production?

What is recovery oxygen uptake?

What is motor unit recruitment?

What are the three types of skeletal muscle fibers and their characteristics?

What are examples of isometric and isotonic contractions?

How can skeletal muscle fibers change with exercise?

What are the major differences between cardiac and skeletal muscle?

Which type of smooth muscle is found in the walls of hollow organs?

How do visceral and multiunit smooth muscle differ?

What happens to muscle strength with aging?

What is the origin?

What is the insertion?

Please label the following diagrams at least once each day.