
Introduction to Muscles

Warm Up- Monday

1. Think of one good thing that happened to you over break.
2. On the left hand side of your next open page, write a big "Unit 4".
3. Write the essential question on the top of the right page.
4. Record the warm up beneath the EQ.
5. Warm Up: List as many different functions of muscles.

Functions of Muscles

Place a checkmark to any functions you got correct, cross out any you got wrong and add to your list if you missed one.

- Produces movement: all movements are because of muscle contraction!
- Maintaining posture
- Stabilizing joints (pull on bones for movements and help strengthen joints)
- Generate heat

Special characteristics of muscles

- Excitability: receive and respond to stimulus
- Contractility: able to shorten when stimulated
- Extensibility: ability to stretch when stimulated
- Elasticity: can recoil and return to resting length

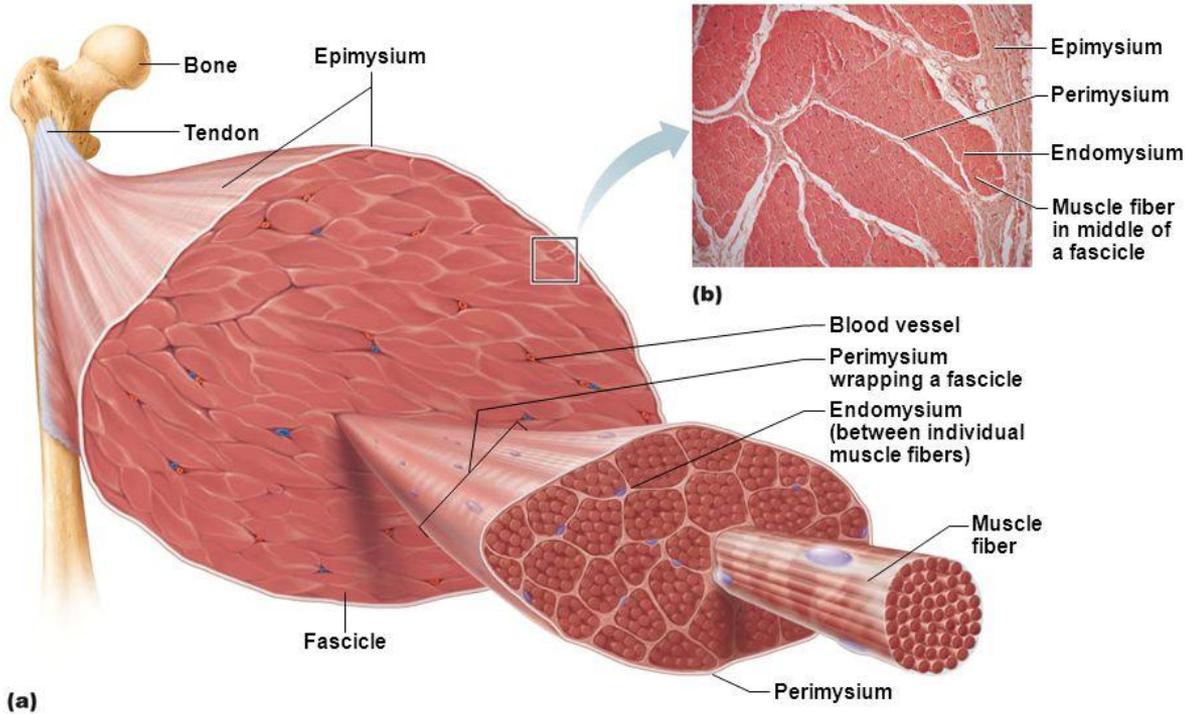
→ BRING YOUR BOOKS ON WEDNESDAY.

Warm Up- Wednesday

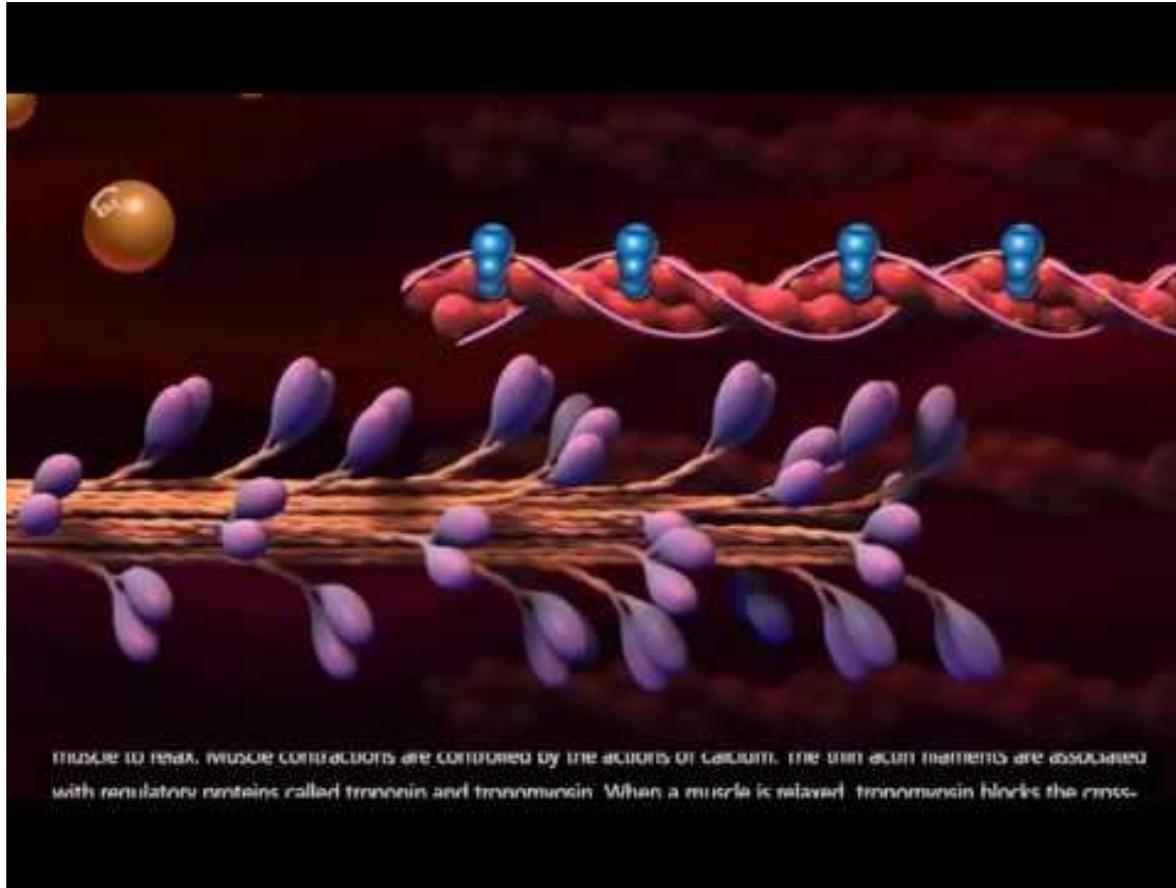
Decide if the following movements are controlled by voluntary or involuntary muscles.

1. Raising your hand in class
2. Your heart beating
3. Blinking your eyes
4. Large intestine walls pushing food through your tract
5. Planking

Figure 9.1 Connective tissue sheaths of skeletal muscle: epimysium, perimysium, and endomysium.



Muscle →
Fascicle → Muscle
Fiber (cell) →
Myofibril
(segment) →
Sarcomere
(contractile unit)
→ Myofilament



MUSCLE TO RELAX, MUSCLE CONTRACTIONS ARE CONTROLLED BY THE ACTIONS OF CALCIUM. THE THIN ACTIN FILAMENTS ARE ASSOCIATED WITH REGULATORY PROTEINS CALLED TROPONIN AND TROPOMYOSIN. WHEN A MUSCLE IS RELAXED, TROPOMYOSIN BLOCKS THE CROSS-

Good Example- Good visuals, labels and voice over explanations



Good use of visuals, and labels but no descriptions.



Good Example: Good visuals, labels & written explanations



Work Time Instructions: Project due Monday

1. Work through the blue handout to define vocabulary and answer the required questions.
2. Once completed decide on your method of how you want to demonstrate muscle contraction: video, stop motion or skit.
3. Information on class website contains helpful book pages, youtube videos, and tutorials on how to use the technology.
4. Make sure your final product includes labels and explanations for the process.
5. Share on google drive with Mrs. Beckham when finished.