

LABORATORY EXERCISE 9

Muscular System

Ex. 9**HISTOLOGY OF MUSCLE CELLS**

1. Smooth muscle tissue is also known as _____ or _____ muscle tissue.
2. List the characteristics of smooth muscle cells:
 - a. _____
 - b. _____
 - c. _____
 - d. _____
3. List the places you can find smooth muscle tissue.
 - a. _____
 - b. _____
 - c. _____
 - d. _____
4. Skeletal muscle tissue is also known as _____ or _____ muscle tissue.
5. List the characteristics of **skeletal** muscle cells:
 - a. _____
 - b. _____
 - c. _____
 - d. _____

6. List the places you can find **skeletal** muscle tissue.
 - a. _____
 - b. _____
 - c. _____
 - d. _____

7. **Cardiac** muscle tissue is only known as _____ .

8. List the characteristics of **cardiac** muscle cells:
 - a. _____
 - b. _____
 - c. _____
 - d. _____

9. List the places you can find **cardiac** muscle tissue.
 - a. _____
 - b. _____
 - c. _____
 - d. _____

10. List the benefits of the **intercalated discs** found in **Cardiac** muscle.
 - a. _____
 - b. _____
 - c. _____
 - d. _____

MICROSCOPIC STUDY OF 3 TYPES OF MUSCLE TISSUE:

1. Examine a slide of the 3 muscle types. Identify each type and draw a sketch below. Label the important components of each cell in each sketch

2. Take turns with your partner quizzing him/her on these 3 cell types and their parts.

DEFINITIONS:

Write a definition and/or draw a sketch to illustrate the following terms.

Intercalated discs	
Sarcomere	
Sarcolemma	
Striations	
Intrinsic beat	
Origin	
Insertion	
Tendon	
Ligament	
Motor end plate	
Neuromuscular junction	
Perimysium	
Agonist	
Antagonist	

BODY MOVEMENTS

Draw a “stick man” sketch in each box below to illustrate the action given.

Flexion	Extension	Hyperextension	Abduction	Adduction
Supination	Pronation	Inversion	Eversion	
Elevation	Depression	Rotation	Circumduction	
Dorsiflexion	Plantar flexion			

ACTIONS

1. The term which means to decrease the angle at a joint is _____.
2. The term which means to increase the angle at a joint is _____.
3. The term which means to point your toe like a ballerina is _____.
4. The term which means to move a body part away from the median plane of the body is _____.
5. The term which means to move a body part toward the median plane of the body is _____.
6. The position of the forearms in the anatomical position is called _____.
7. The position of the forearms turned the opposite of the anatomical position _____.
8. The action of the feet with the soles turned inward so they are facing one another is called _____.
9. The action of the feet with the soles turned outward _____.
10. The action of sticking out your chin is called: _____.

MUSCLE NOMENCLATURE

List the things muscles can be named for and then give an example of a muscle for each.

	<i>TYPE OF NAME</i>	<i>MUSCLE EXAMPLE</i>
1.		
2.		
3.		
4.		
5.		