

Name: _____

Lab section: _____

Pre-lab exercise (adapted from Human Anatomy and Physiology, Elaine N. Marieb). **Due at the beginning of your lab session.**

1. Match the following. Each term can be used more than once.

- | | |
|-----------------------|----------------------|
| a. cardiac muscle | g. epithelium |
| b. skeletal muscle | h. bone |
| c. smooth muscle | i. loose areolar CT |
| d. adipose tissue | j. elastic cartilage |
| e. dense regular CT | k. hyaline cartilage |
| f. dense irregular CT | l. fibrocartilage |

- _____ Structural support of the external ear and other structures which need support with flexibility.
- _____ Lining of digestive and respiratory tracts.
- _____ Produces voluntary movements of bones.
- _____ Storage site of neutral fats.
- _____ Major component of tendons and aponeuroses.
- _____ Covers articular surfaces of long bones.
- _____ Striated and formed by long multinucleate cells.
- _____ Found in dermis where it withstands tension along many different planes.
- _____ Found in walls of hollow organs such as uterus or stomach.
- _____ Protects and supports soft tissues
- _____ Contains collagen and calcium deposits.
- _____ Striated and forms cell junctions visible as intercalated disks.

2. Match the following epithelial types with the appropriate description below.

- | | |
|---------------------------------------|------------------------|
| a. pseudostratified ciliated columnar | e. stratified columnar |
| b. simple columnar | f. stratified squamous |
| c. simple cuboidal | g. stratified cuboidal |
| d. simple squamous | h. transitional |

- | | |
|--|---|
| _____ Lines most of the digestive tract. | _____ Found in urinary tract organs. |
| _____ Lines the esophagus. | _____ Secretory cells of salivary glands. |
| _____ Lines much of the respiratory tract. | _____ Forms the walls of air sacs in lungs. |

3. Name and describe the major components of connective tissue matrix.

4. A torn knee cartilage is often removed rather than allowed to heal. Why?