

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

# TISSUES OF THE BODY

1. Twelve tissue types are diagrammed below. Identify each tissue type by inserting the correct name in the space below the image. Select different colors for the following structures and use them to color the coding circle and corresponding structures in the in the images.



Epithelial Cells



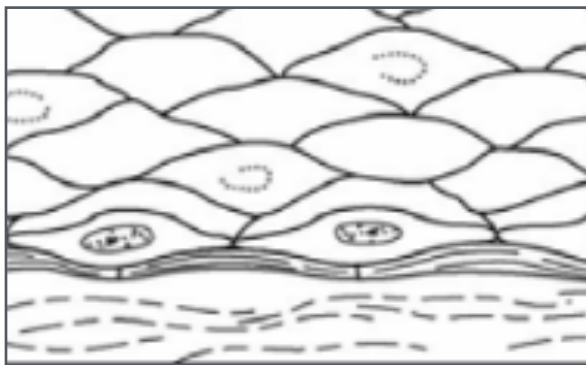
Nerve Cells



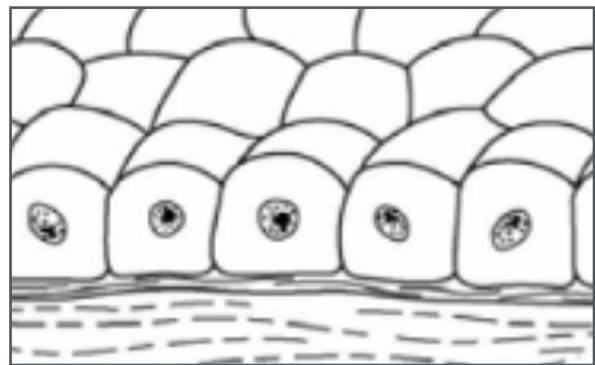
Muscle Cells



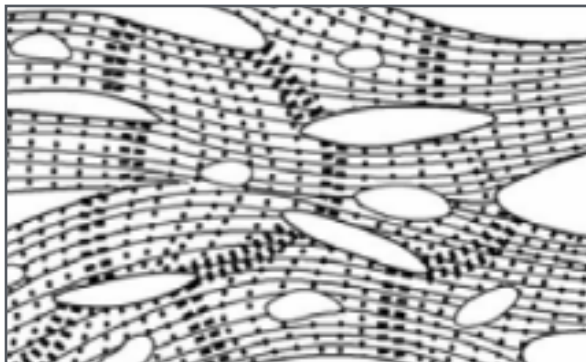
Matrix (should be colored differently from other cell types)



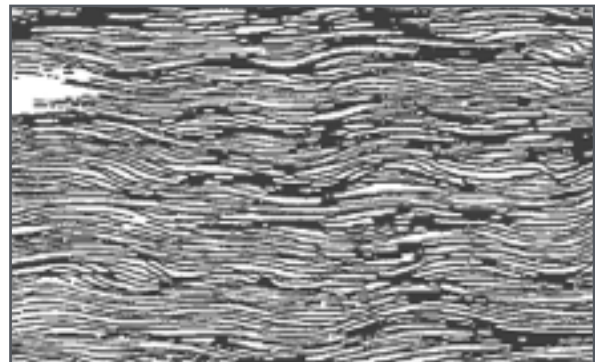
A. Simple squamous epithelium



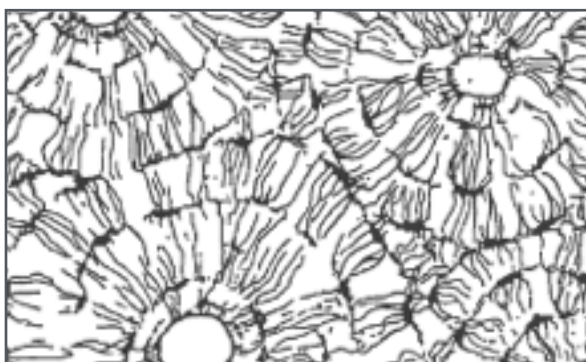
B. Single cuboidal epithelium



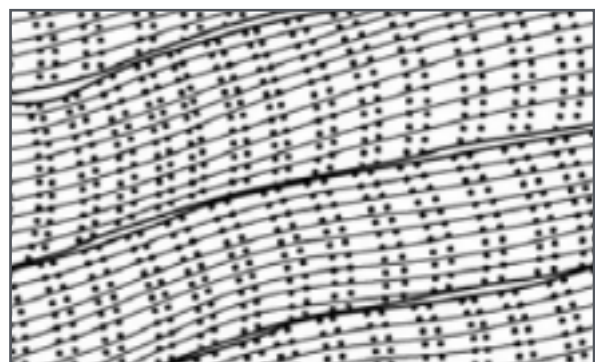
C. Cardiac muscle



D. Dense fibrous connective tissue

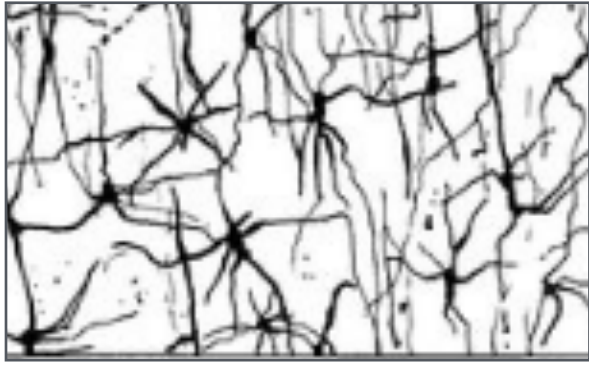


E. Bone

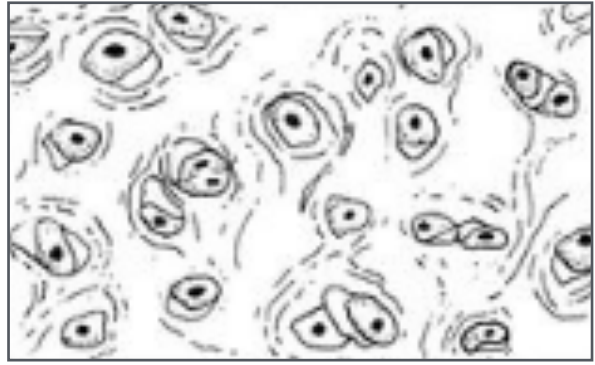


F. Skeletal muscle

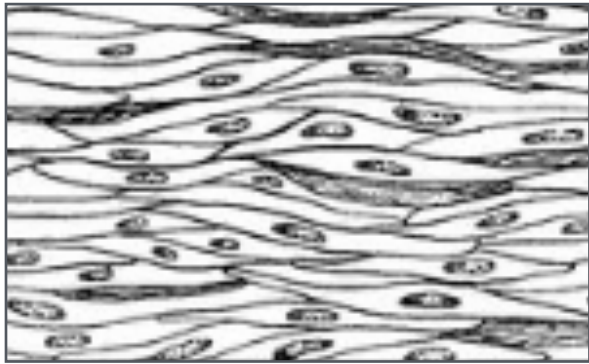
Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_



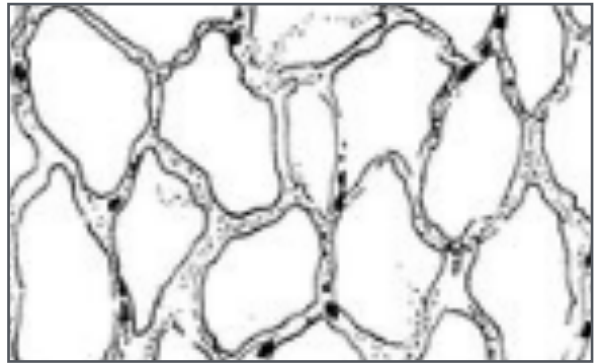
G. Nervous tissue



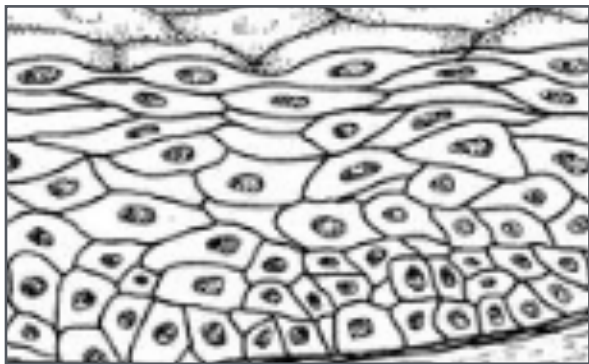
H. Hyaline cartilage



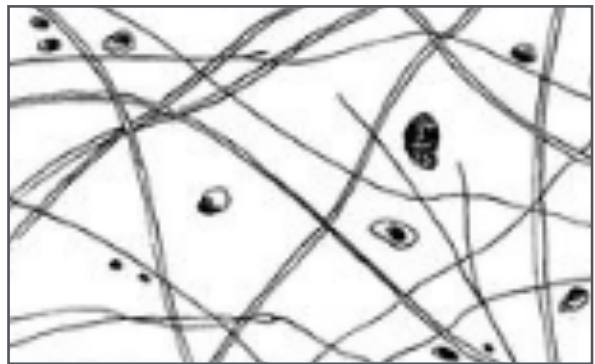
I. Smooth muscle



J. Adipose tissue



K. Stratified squamous



L. Loose connective tissue

Noncellular parts of D, E, H, J, & L are matrix.

2. Describe briefly how the particular structure of a neuron relates to its function in the body.

Long cytoplasm extensions (dendrites & axons) transmit impulses over long distances easily.

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

3. Use the four choices below to correctly identify the major tissue types described. Enter the appropriate letter of the tissue type, use capital letters.

A. Connective

B. Epithelium

C. Muscle

D. Nervous

- \_\_\_B\_\_\_ Forms mucous, serous, and epidermal membranes.
- \_\_\_C\_\_\_ Allows for movement of limbs and for organ movements within the body.
- \_\_\_D\_\_\_ Transmits electrochemical impulses.
- \_\_\_A\_\_\_ Supports body organs.
- \_\_\_B\_\_\_ Cells of this tissue may absorb and/or secrete substances.
- \_\_\_D\_\_\_ Basis of the major controlling system of the body.
- \_\_\_C\_\_\_ The major function of the cells of this tissue type is to shorten.
- \_\_\_B\_\_\_ Forms hormones.
- \_\_\_A\_\_\_ Packages and protects body organs.
- \_\_\_A\_\_\_ Characterized by having large amounts of nonliving matrix.
- \_\_\_C\_\_\_ Allows you to smile, grasp, swim, ski, and shoot an arrow.
- \_\_\_A\_\_\_ Most widely distributed tissue type in the body.
- \_\_\_D\_\_\_ Forms the brain and spinal cord.

4. Using the six choices below, identify the following specific type(s) of epithelial tissue. Enter the appropriate letter or classification term in the answer blanks.

A. Pseudostratified ciliated

B. Simple columnar

C. Simple cuboidal

D. Simple squamous

E. Stratified squamous

F. Transitional

- \_\_\_A or E\_\_\_ Forms the lining of the esophagus.
- \_\_\_B\_\_\_ Forms the lining of the stomach and small intestine.
- \_\_\_D\_\_\_ Found in the lung tissue (alveolar sacs).
- \_\_\_C\_\_\_ Forms the collecting tubules of the kidney.
- \_\_\_E\_\_\_ Forms the epidermis of the skin.
- \_\_\_F\_\_\_ Found in the bladder lining; peculiar cells that slide over one another.
- \_\_\_D\_\_\_ Forms thin serous membranes; a single layer of flattened cells.

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

5. The three types of muscle tissue exhibit certain similarities and differences. Place an **X** in the appropriate spaces in the following table to indicate which muscle types exhibit each characteristic.

Characteristic	Skeletal	Cardiac	Smooth
Voluntarily controlled	<b>X</b>		
Involuntarily controlled		<b>X</b>	<b>X</b>
Banded appearance	<b>X</b>	<b>X</b>	
Single nucleus in each cell		most	<b>X</b>
Multinucleate	<b>X</b>		
Found attached to bones	<b>X</b>		
Allows you to direct your eyeballs	<b>X</b>		
Found in the walls of stomach, uterus, and arteries			<b>X</b>
Contains spindle-shaped cells			<b>X</b>
Contains cylindrical cells with branching ends		<b>X</b>	
Contains long, non branching cylindrical cells	<b>X</b>		
Displays intercalated disks		<b>X</b>	
Concerned with locomotion of the body as a whole	<b>X</b>		
Changes the internal volume of an organ as it contracts			<b>X</b>
Tissue of the circulatory pump		<b>X</b>	

6. Circle the term that does not belong in each of the following groupings.

- columnar    **areolar**    cuboidal    squamous
- collagen    **cell**    matrix    cell product
- cilia    flagellum    microvilli    **elastic fibers**
- glands    **bones**    epidermis    mucosal
- adipose    hyaline    osseous    **nervous**
- blood**    smooth    cardiac    skeletal