

1. Basic Tissues

Select the tissues described by the statements.

Epithelial

Connective

Muscle

Nerve

- 1) Adapted for contraction.
- 2) Contains scattered cells in a matrix.
- 3) Sheets of closely packed cells.
- 4) Composed of neurons and supporting cells.
- 5) Lacks blood vessels.
- 6) Supports and protects organs.
- 7) Lines body cavities and covers organs.
- 8) Forms and conducts impulses.
- 9) Functions in absorption and secretion.

Muscle

Connective

Epithelial

Nerve

Epithelial

Connective

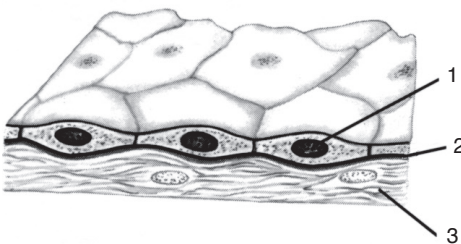
Epithelial

Nerve

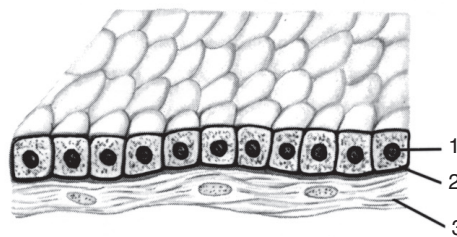
Epithelial

2. Epithelial Tissues

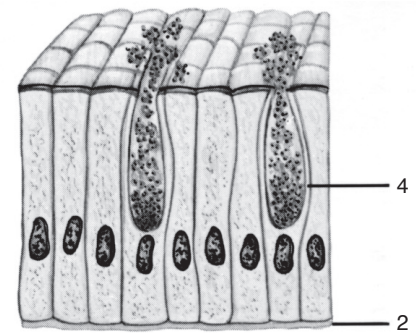
- a. Write the names of the tissues in the spaces provided and place the number of each structure in the space by the correct label.



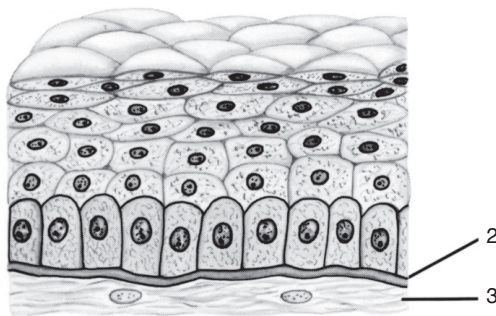
6) Simple squamous



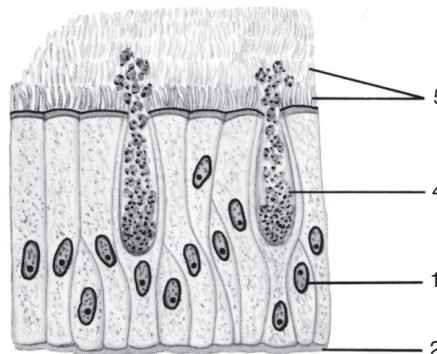
7) Simple cuboidal



8) Simple columnar



9) Stratified squamous



10) Pseudostratified ciliated columnar

- 2 Basement membrane
1 Cell nucleus
5 Cilia
3 Connective tissue
4 Goblet cell

b. Write the number of the appropriate tissue described in the space provided.

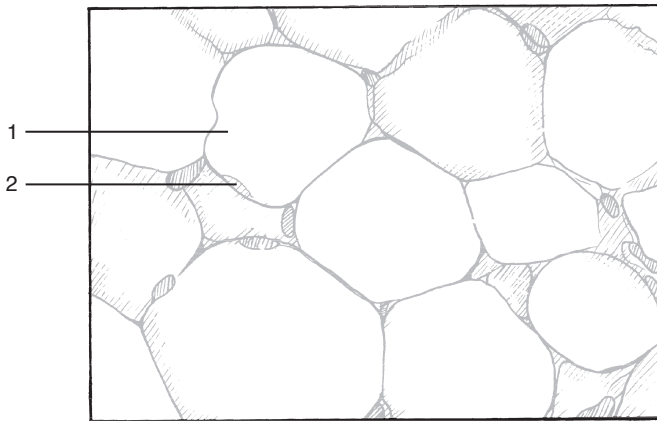
- 1) Simple squamous
- 2) Simple cuboidal
- 3) Simple columnar
- 4) Pseudostratified ciliated columnar
- 2 Forms secretory cells of glands.
- 1 Lines interior of blood vessels.
- 3 Lines interior of stomach and intestines.
- 4 Lines upper respiratory passages.
- 1 Lines ventral body cavity.

- 5) Stratified keratinized squamous
- 6) Stratified nonkeratinized squamous
- 7) Transitional
- 5 Forms outer layer of skin.
- 7 Lines interior of urinary bladder.
- 6 Lines mouth and vagina.
- 3, 4 Contain goblet cells.
- 1 Forms air sacs of lungs.

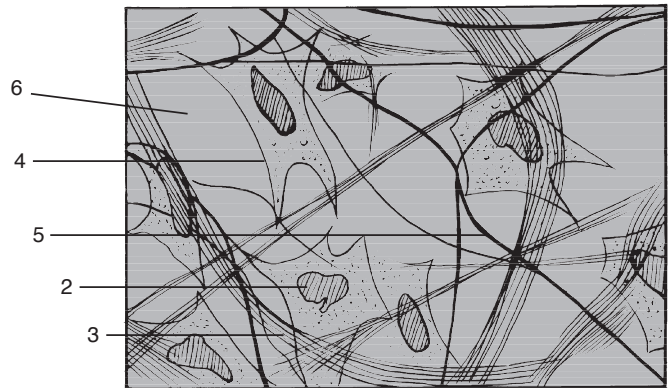
3. Connective Tissue Proper

a. Write the names of the tissues in the spaces provided and place the number of each structure in the space by the correct label.

- 3 Collagenous fiber
- 5 Elastic fiber
- 1 Fat droplet
- 4 Fibroblast
- 6 Ground substance
- 2 Nucleus



7) Adipose



8) Loose connective

b. Select the connective tissues described by the statements.

- 1) Loose
- 2) Adipose
- 3) Fibrous
- 4) Elastic

- 2 Storage area for fat.
- 1 Binds skin to muscles.
- 3 Forms ligaments and tendons.
- 4 In walls of arteries.
- 1 Supporting framework for internal organs.
- 3 Very strong but pliable.
- 3 Poor blood supply.
- 2 Insulates body.
- 3 Tightly packed collagenous fibers.
- 4 Enables expansion and contraction of lungs.
- 2 Protective cushion for internal organs.
- 3 Inner layer of skin.

4. Special Connective Tissues

- a. Write the names of the tissues in the spaces provided and place the number of each structure in the space by the correct label.

4 Canaliculi

3 Chondrocyte in a lacuna

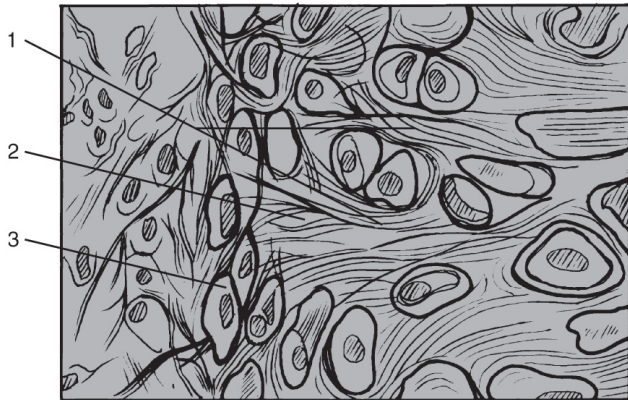
1 Elastic fibers

6 Osteonic canal

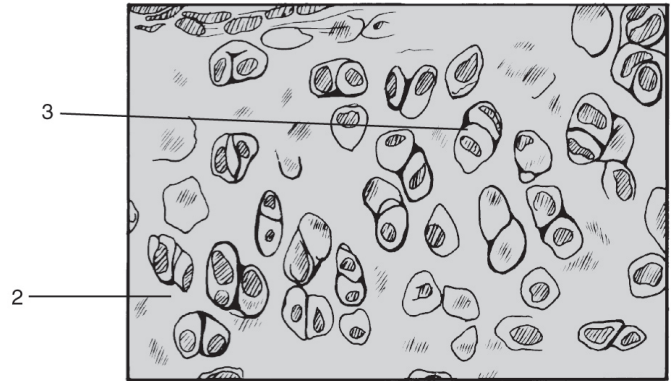
7 Lamellae

2 Nonfibrous matrix

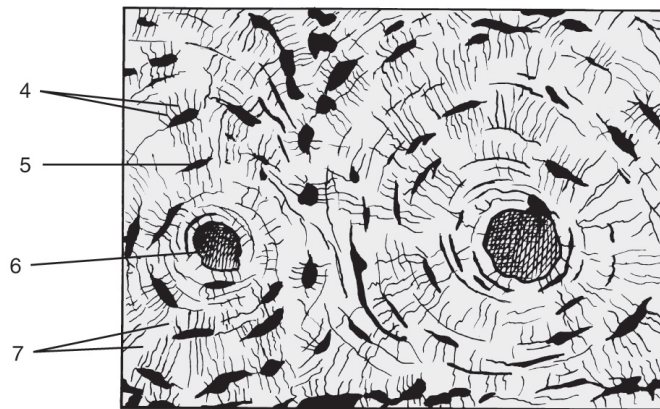
5 Osteocyte in a lacuna



8) Elastic cartilage



9) Hyaline cartilage



10) Compact bone

- b. Select the connective tissues described by the statements.

1) Elastic cartilage

2) Fibrocartilage

3) Hyaline cartilage

4) Bone

5) Blood

2 Intervertebral disks.

1 Pinna of outer ear.

3 Forms embryonic bones.

5 Liquid matrix.

3 Smooth, glassy matrix.

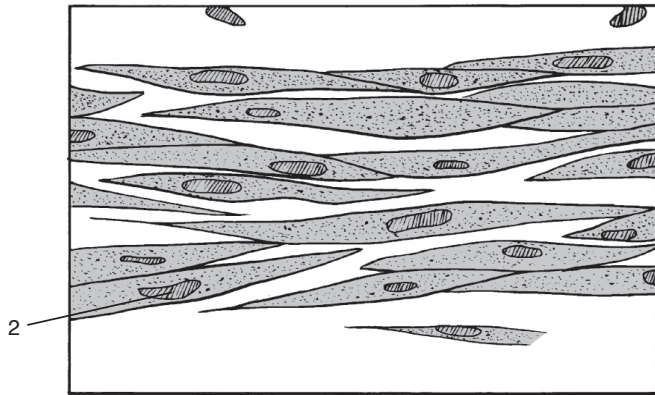
1 Imparts resiliency.

4 Hard, rigid matrix.

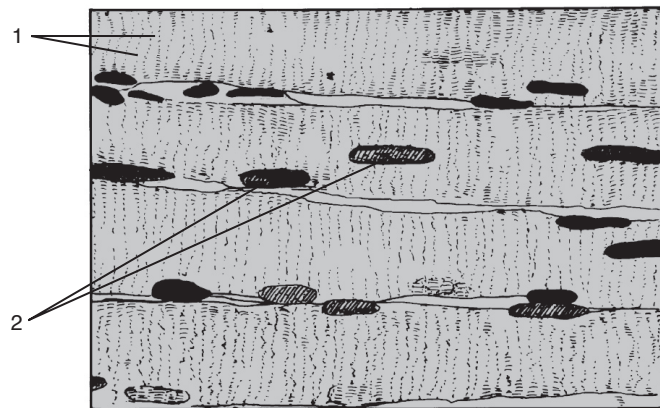
2 Adapted to absorb shocks.

5. Muscle Tissues

- a. Write the names of the muscle tissues in the spaces provided and place the number of each structure in the space by the correct label.

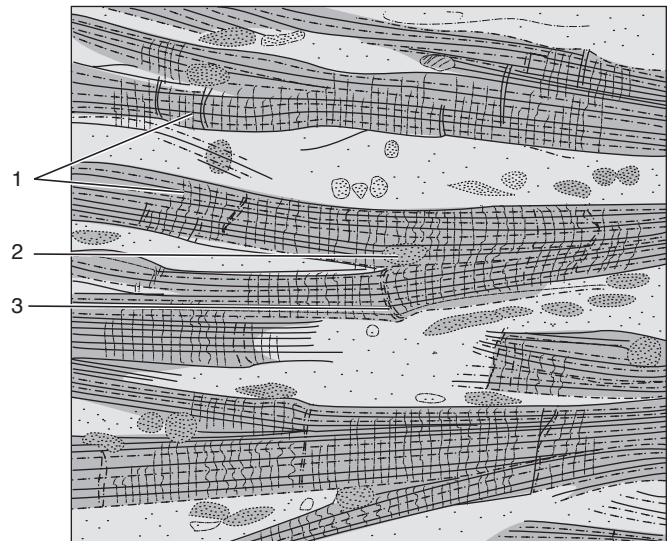


4) Smooth



5) Skeletal

- 3 Intercalated disk
2 Nucleus
1 Striations



6) Cardiac

- b. Select the muscle tissues described by the statements.

1) Cardiac

2) Skeletal

3) Smooth

2 Voluntary

3 Slow contractions

1, 3 Involuntary

2 Rapid contractions

3 In walls of intestine

1 Rhythmic contractions

6. Nerve Tissue

Indicate whether each statement is true (T) or false (F).

T Nerve cells are called neurons.

T Nerve cells form and transmit neural impulses.

T The nucleus of a nerve cell is located in the cell body.

F Supporting cells in nerve tissue are fibroblasts.

7. Clinical Applications



- a. Most cancers are carcinomas. How do you explain this? Epithelial cells undergo continuous cell division.

- b. Judy tore a knee cartilage on a skiing vacation. Can she expect a rapid recovery? No Explain. Cartilage contains no blood vessels.