Tissues Study Slides

Chapter 4
Each of the following is a primary tissue type, **except**

A. muscle tissue.
B. neural tissue.
C. osseous tissue.
D. connective tissue.
E. epithelial tissue.
ANSWER

- Each of the following is a primary tissue type, except
  A. muscle tissue.
  B. neural tissue.
  C. osseous tissue.
  D. connective tissue.
  E. epithelial tissue.
A sheet of cells that covers a surface or lines a body cavity is:

A. Epithelial tissue
B. Connective tissue
C. Muscular tissue
D. Nervous tissue
E. Lipids
____________ is a sheet of cells that covers a surface or lines a body cavity

A. Epithelial tissue
B. Connective tissue
C. Muscular tissue
D. Nervous tissue
E. Lipids
The framework or stroma of organs such as the spleen, liver, and lymph nodes is made up of _____ tissue.
A. loose connective
B. regular dense connective
C. irregular dense connective
D. reticular connective
E. adipose
The framework or stroma of organs such as the spleen, liver, and lymph nodes is made up of ______ tissue.

A. loose connective
B. regular dense connective
C. irregular dense connective
D. reticular connective
E. adipose
Unlike cartilage, bone
A. is a connective tissue.
B. has a matrix that contains collagen.
C. is very vascular.
D. has a two-layered outer covering.
E. has cells that are located in spaces called lacunae.
 Unlike cartilage, bone

A. is a connective tissue.
B. has a matrix that contains collagen.
C. is very vascular.
D. has a two-layered outer covering.
E. has cells that are located in spaces called lacunae.
The primary tissue type responsible for movement is

A. Epithelial tissue  
B. Connective tissue  
C. Muscular tissue  
D. Nervous tissue  
E. Lipids
The primary tissue type responsible for movement is

A. Epithelial tissue
B. Connective tissue
C. **Muscular tissue**
D. Nervous tissue
E. Lipids
The dominant fiber type in dense connective tissue is

A. collagen.
B. elastin.
C. actin.
D. myosin.
E. fibrin.
The dominant fiber type in dense connective tissue is

A. collagen.
B. elastin.
C. actin.
D. myosin.
E. fibrin.
Adhesions occur when
A. serous membranes are damaged.
B. synovial membranes are damaged.
C. muscle is damaged.
D. nerve cells are damaged.
E. all of the above
Adhesions occur when
A. serous membranes are damaged.
B. synovial membranes are damaged.
C. muscle is damaged.
D. nerve cells are damaged.
E. all of the above
The primary tissue type that always has an unattached free surface is
A. Epithelial tissue
B. Connective tissue
C. Muscular tissue
D. Nervous tissue
E. Lipids
The primary tissue type that always has an unattached free surface is

A. Epithelial tissue
B. Connective tissue
C. Muscular tissue
D. Nervous tissue
E. Lipids
Each of the following is an example of dense connective tissue, **except**

A. tendons.
B. ligaments.
C. aponeuroses.
D. areolar tissue.
E. elastic tissue.
Each of the following is an example of dense connective tissue, except

A. tendons.
B. ligaments.
C. aponeuroses.
D. areolar tissue.
E. elastic tissue.
The three main components of connective tissue are:

A. Ground substance, fibers and cells
B. Alveoli, fibrous capsule, and secretory cells
C. Collagen, elastin, and reticular fibers
D. Fibroblasts, chondroblasts, and osteoblasts
The three main components of connective tissue are:

A. **Ground substance, fibers and cells**
B. Alveoli, fibrous capsule, and secretory cells
C. Collagen, elastin, and reticular fibers
D. Fibroblasts, chondroblasts, and osteoblasts
All mature connective tissue arose from
A. Mesenchyme
B. Mucous connective tissue
C. Mesothelium
D. Endothelium
E. Connective tissue proper
ANSWER

➢ All mature connective tissue arose from

A. Mesenchyme
B. Mucous connective tissue
C. Mesothelium
D. Endothelium
E. Connective tissue proper
Tissues that provide strength and support for areas subjected to stresses from many directions are

A. tendons.
B. ligaments.
C. dense irregular connective tissues.
D. aponeuroses.
E. areolar tissue.
Tissues that provide strength and support for areas subjected to stresses from many directions are
A. tendons.
B. ligaments.
C. dense irregular connective tissues.
D. aponeuroses.
E. areolar tissue.
The tissue that always has a free surface exposed to the internal or external environment is
A. epithelial tissue.
B. connective tissue.
C. muscle tissue.
D. neural tissue.
E. contractive tissue.
The tissue that always has a free surface exposed to the internal or external environment is

A. epithelial tissue.
B. connective tissue.
C. muscle tissue.
D. neural tissue.
E. contractive tissue.
Characteristics of epithelia include

A. attachment.
B. avascularity.
C. regeneration.
D. polarity.
E. all of the above
Characteristics of epithelia include

A. attachment.
B. avascularity.
C. regeneration.
D. polarity.
E. all of the above
An immature bone cell would be called

A. chondrocyte
B. Stem cell
C. osteocyte
D. osteoblast
An immature bone cell would be called
A. chondrocyte
B. Stem cell
C. osteocyte
D. osteoblast
Muscle that moves food and urine is

A. Skeletal muscle
B. Cardiac muscle
C. Smooth muscle
Muscle that moves food and urine is
A. Skeletal muscle
B. Cardiac muscle
C. Smooth muscle
Chondroitin sulfate is found in the matrix of

A. epithelial tissue.
B. cartilage.
C. areolar tissue.
D. elastic connective tissue.
E. adipose tissue.
ANSWER

- Chondroitin sulfate is found in the matrix of
  - A. epithelial tissue.
  - B. cartilage.
  - C. areolar tissue.
  - D. elastic connective tissue.
  - E. adipose tissue.
Functions of epithelia include all of the following, except

A. providing physical protection.
B. controlling permeability.
C. absorption.
D. producing specialized secretions.
E. storing energy reserves.
Functions of epithelia include all of the following, except

A. providing physical protection.
B. controlling permeability.
C. absorption.
D. producing specialized secretions.
E. *storing energy reserves.*
Which statement best describes connective tissue?

A. Always arranged in a single layer of cells
B. Usually lines a body cavity
C. Primarily concerned with secretion
D. Usually contains a large amount of extracellular matrix
E. Is always avascular
Which statement best describes connective tissue?

A. Always arranged in a single layer of cells
B. Usually lines a body cavity
C. Primarily concerned with secretion
D. **Usually contains a large amount of extracellular matrix**
E. Is always avascular
Specialized membrane junctions that prevent separation of cells are called
A. Tight junctions
B. Desmosomes
C. Gap junctions
D. Ribosomes
E. Ground substance
Specialized membrane junctions that prevent separation of cells are called

A. Tight junctions

B. **Desmosomes**

C. Gap junctions

D. Ribosomes

E. Ground substance
Epithelial cells that are adapted for absorption or secretion usually have ______ at their free surface.

A. many mitochondria
B. cilia
C. microvilli
D. junctional complexes
E. Golgi complexes
Epithelial cells that are adapted for absorption or secretion usually have _____ at their free surface.

A. many mitochondria
B. cilia
C. microvilli
D. junctional complexes
E. Golgi complexes
Specialized junctions that connect cells to extracellular matrix are called

A. Tight junctions  
B. Desmosomes  
C. Gap junctions  
D. Hemidesmosomes  
E. Ground substance
ANSWER

➤ Specialized junctions that connect cells to extracellular matrix are called
A. Tight junctions
B. Desmosomes
C. Gap junctions
D. Hemidesmosomes
E. Ground substance
Chondrocytes are to cartilage as osteocytes are to
A. blood.
B. epithelium.
C. fat.
D. bone.
E. neural tissue.
ANSWER

- Chondrocytes are to cartilage as osteocytes are to
  A. blood.
  B. epithelium.
  C. fat.
  D. bone.
  E. neural tissue.
The three types of connective tissue include

A. connective tissue proper, fluid connective tissues, and supporting connective tissues.
B. epithelial, muscle, and neural.
C. glandular, exocrine, and endocrine.
D. A and C only
E. all of the above
The three types of connective tissue include:

A. connective tissue proper, fluid connective tissues, and supporting connective tissues.
B. epithelial, muscle, and neural.
C. glandular, exocrine, and endocrine.
D. A and C only

E. all of the above
A type of intercellular connection in which there is a partial fusion of the lipid portions of the two cell membranes is termed a

A. tight junction.
B. gap junction.
C. intermediate junction.
D. desmosome.
E. none of the above
A type of intercellular connection in which there is a partial fusion of the lipid portions of the two cell membranes is termed a

A. tight junction.
B. gap junction.
C. intermediate junction.
D. desmosome.
E. none of the above
Specialized junctions that allow chemical substances to pass between them are called:

A. Tight junctions
B. Desmosomes
C. Gap junctions
D. Hemidesmosomes
E. Ground substance
ANSWER

- Specialized junctions that allow chemical substances to pass between them are called
  A. Tight junctions
  B. Desmosomes
  C. **Gap junctions**
  D. Hemidesmosomes
  E. Ground substance
Epithelial cells are connected to the basement membrane by

A. Tight junctions
B. Desmosomes
C. Gap junctions
D. Hemidesmosomes
E. Ground substance
Epithelial cells are connected to the basement membrane by

A. Tight junctions
B. Desmosomes
C. Gap junctions
D. Hemidesmosomes
E. Ground substance
Epithelium is connected to underlying connective tissue by

A. a basement membrane.
B. interfacial canals.
C. a basal lamina.
D. a reticular lamina.
E. proteoglycan.
Epithelium is connected to underlying connective tissue by

A. a basement membrane.
B. interfacial canals.
C. a basal lamina.
D. a reticular lamina.
E. proteoglycan.
Wharton’s jelly is an alternate term for
A. Marfan’s syndrome.
B. mucous connective tissue.
C. ground substance.
D. collagen fibers.
E. C and D
ANSWER

- Wharton’s jelly is an alternate term for
  A. Marfan’s syndrome.
  **B. mucous connective tissue.**
  C. ground substance.
  D. collagen fibers.
  E. C and D
The basic shapes of epithelial cells include all of the following, except:

A. stratified.
B. squamous.
C. cuboidal.
D. columnar.
E. all of the above.
The basic shapes of epithelial cells include all of the following, except:

A. stratified.
B. squamous.
C. cuboidal.
D. columnar.
E. all of the above
Cells of the stomach are connected by

A. Tight junctions
B. Desmosomes
C. Gap junctions
D. Ribosomes
E. Ground substance
Cells of the stomach are connected by

A. **Tight junctions**
B. Desmosomes
C. Gap junctions
D. Ribosomes
E. Ground substance
Osseous tissue is also called

A. cartilage.
B. fat.
C. cellulite.
D. bone.
E. ligament.
Osseous tissue is also called

A. cartilage.
B. fat.
C. cellulite.
D. bone.
E. ligament. 
- Simple columnar epithelium lines
  A. The stomach
  B. The trachea
  C. The bladder
  D. Mouth
  E. Nasal cavity
ANSWER

- Simple columnar epithelium lines
  - A. The stomach
  - B. The trachea
  - C. The bladder
  - D. Mouth
  - E. Nasal cavity
_____ attach skeletal muscles to bones, and _____ connect one bone to another.
A. Ligaments; tendons
B. Ligaments; aponeuroses
C. Tendons; ligaments
D. Aponeuroses; tendons
E. Reticular tissues; tendons
ANSWER

- ______ attach skeletal muscles to bones, and ______ connect one bone to another.
  
  A. Ligaments; tendons
  B. Ligaments; aponeuroses
  C. **Tendons; ligaments**
  D. Aponeuroses; tendons
  E. Reticular tissues; tendons
Glands that have whole cells that die and rupture to release their product are called

A. Merocrine
B. Apocrine
C. Holocrine
D. Goblet cells
Glands that have whole cells that die and rupture to release their product are called

A. Merocrine
B. Apocrine
C. Holocrine
D. Goblet cells
Which of the following membranes line cavities that communicate with the exterior of the body?

A. mucous  
B. serous  
C. cutaneous  
D. synovial  
E. pleural
ANSWER

Which of the following membranes line cavities that communicate with the exterior of the body?

A. mucous
B. serous
C. cutaneous
D. synovial
E. pleural
The type of epithelium that is found lining internal body compartments and blood vessels is

A. simple squamous epithelium.
B. stratified squamous epithelium.
C. simple cuboidal epithelium.
D. stratified cuboidal epithelium.
E. transitional epithelium.
The type of epithelium that is found lining internal body compartments and blood vessels is

A. simple squamous epithelium.
B. stratified squamous epithelium.
C. simple cuboidal epithelium.
D. stratified cuboidal epithelium.
E. transitional epithelium.
Thin branched fibers that form the framework of organs are called

A. Collagen fibers
B. Reticular fibers
C. Elastic fibers
D. Canaliculi
E. Lacunae
Thin branched fibers that form the framework of organs are called
A. Collagen fibers
B. **Reticular fibers**
C. Elastic fibers
D. Canaliculi
E. Lacunae
The tissue known as the “universal packing material” is
A. Dense irregular connective tissue
B. Areolar connective tissue
C. Reticular connective tissue
D. Cartilage
E. Stratified squamous epithelium
The tissue known as the “universal packing material” is

A. Dense irregular connective tissue
B. Areolar connective tissue
C. Reticular connective tissue
D. Cartilage
E. Stratified squamous epithelium
The reduction of friction between the parietal and visceral surfaces of an internal cavity is the function of

A. cutaneous membranes.
B. mucous membranes.
C. serous membranes.
D. synovial membranes.
E. the lamina propria.
ANSWER

- The reduction of friction between the parietal and visceral surfaces of an internal cavity is the function of

  A. cutaneous membranes.
  B. mucous membranes.
  **C. serous membranes.**
  D. synovial membranes.
  E. the lamina propria.
Which of the following is not a correct statement about simple epithelia?

A. They afford little mechanical protection.
B. They are characteristic of regions where secretion or absorption occurs.
C. They line internal compartments and passageways.
D. They cover surfaces subjected to mechanical or chemical stress.
E. They are avascular.
Which of the following is not a correct statement about simple epithelia?

A. They afford little mechanical protection.
B. They are characteristic of regions where secretion or absorption occurs.
C. They line internal compartments and passageways.
D. They cover surfaces subjected to mechanical or chemical stress.
E. They are avascular.
The four basic types of tissue in the body are

A. epithelial, connective, muscle, and neural.
B. simple, cuboidal, squamous, and stratified.
C. fibroblasts, adipocytes, melanocytes, and mesenchyme.
D. lymphocytes, macrophages, microphages, and adipocytes.
E. epithelial, stratified, squamous, and lipid.
The four basic types of tissue in the body are

A. epithelial, connective, muscle, and neural.
B. simple, cuboidal, squamous, and stratified.
C. fibroblasts, adipocytes, melanocytes, and mesenchyme.
D. lymphocytes, macrophages, microphages, and adipocytes.
E. epithelial, stratified, squamous, and lipid.
Aponeuroses are bands of dense regular connective tissue that bind
A. Muscle to bone
B. Bone to bone
C. Muscle to muscle
ANSWER

Aponeuroses are bands of dense regular connective tissue that bind

A. Muscle to bone
B. Bone to bone
C. Muscle to muscle
Dense irregular connective tissue can be found in the
A. Epidermis
B. Blood vessels
C. Heart valves
D. Breasts
E. Spleen
Dense irregular connective tissue can be found in the

A. Epidermis
B. Blood vessels
C. Heart valves
D. Breasts
E. Spleen
The serous membrane lining the abdominal cavity is the

A. pleura.
B. peritoneum.
C. pericardium.
D. periosteum.
E. perichondrium.
The serous membrane lining the abdominal cavity is the

A. pleura.

B. peritoneum.

C. pericardium.

D. periosteum.

E. perichondrium.
The three basic types of fibers in connective tissue are
A. tendons, ligaments, and elastic ligaments.
B. loose, dense, and irregular.
C. cartilage, bone, and collagen.
D. collagen, reticular, and elastic.
E. polar, cellular, and permeable.
The three basic types of fibers in connective tissue are

A. tendons, ligaments, and elastic ligaments.
B. loose, dense, and irregular.
C. cartilage, bone, and collagen.
D. collagen, reticular, and elastic.
E. polar, cellular, and permeable.
The whites of your eyeball are made up of

A. Dense irregular connective tissue
B. Dense regular connective tissue
C. Reticular connective tissue
D. Adipose tissue
E. Areolar connective tissue
ANSWER

- The whites of your eyeball are made up of

  A. Dense irregular connective tissue
  B. Dense regular connective tissue
  C. Reticular connective tissue
  D. Adipose tissue
  E. Areolar connective tissue
The tissue found in the tip of your nose is

A. Fibrous cartilage
B. Elastic cartilage
C. Hyaline cartilage
D. Dense regular connective tissue
E. Dense irregular connective tissue
The tissue found in the tip of your nose is

A. Fibrous cartilage
B. Elastic cartilage
C. **Hyaline cartilage**
D. Dense regular connective tissue
E. Dense irregular connective tissue
The type of epithelium found where absorption or secretion takes place is _____ epithelium.
A. simple squamous
B. simple cuboidal
C. pseudostratified columnar
D. all of the above
E. both A and B
The type of epithelium found where absorption or secretion takes place is _____ epithelium.

A. simple squamous
B. simple cuboidal
C. pseudostratified columnar
D. all of the above
E. both A and B
The tissue found between the bones of your knee is
A. Elastic cartilage
B. Hyaline cartilage
C. Fibrocartilage
D. Adipose tissue
E. Areolar connective tissue
ANSWER

The tissue found between the bones of your knee is
A. Elastic cartilage
B. Hyaline cartilage
C. Fibrocartilage
D. Adipose tissue
E. Areolar connective tissue
Intercalated discs are characteristic of
A. smooth muscle tissue.
B. cardiac muscle tissue.
C. skeletal muscle tissue.
D. A, B, and C
E. none of the above
Intercalated discs are characteristic of

A. smooth muscle tissue.

**B. cardiac muscle tissue.**

C. skeletal muscle tissue.

D. A, B, and C

E. none of the above
The strongest of all the cartilages is:

A. Hyaline cartilage
B. Elastic cartilage
C. Fibrocartilage
The strongest of all the cartilages is
A. Hyaline cartilage
B. Elastic cartilage
C. fibrocartilage
Which of the following refers to the dense connective tissue that forms the capsules that surround many organs?

A. superficial fascia
B. hypodermis
C. deep fascia
D. subserous fascia
E. subcutaneous layer
Which of the following refers to the dense connective tissue that forms the capsules that surround many organs?

A. superficial fascia  
B. hypodermis  
C. deep fascia  
D. subserous fascia  
E. subcutaneous layer
The cartilage that provides support and reduces friction is

A. Hyaline cartilage
B. Fibrocartilage
C. Elastic cartilage
The cartilage that provides support and reduces friction is

A. Hyaline cartilage
B. Fibrocartilage
C. Elastic cartilage
The cartilage that provides support while being extremely flexible is

A. Hyaline cartilage
B. Fibrocartilage
C. Elastic cartilage
The cartilage that provides support while being extremely flexible is

A. Hyaline cartilage
B. Fibrocartilage
C. Elastic cartilage
Which type of tissue provides structural support for other tissues?
A. neural tissue
B. connective tissue
C. endothelial tissue
D. muscle tissue
E. epithelial tissue
ANSWER

- Which type of tissue provides structural support for other tissues?
  A. neural tissue
  B. **connective tissue**
  C. endothelial tissue
  D. muscle tissue
  E. epithelial tissue
The type of cartilage found in your outer ear is

A. Hyaline cartilage
B. Fibrocartilage
C. Elastic cartilage
The type of cartilage found in your outer ear is

A. Hyaline cartilage
B. Fibrocartilage
C. Elastic cartilage
Tissue that is specialized for contraction is ______ tissue.

A. loose connective
B. dense connective
C. epithelial
D. nerve
E. muscle
Tissue that is specialized for contraction is _____ tissue.

A. loose connective
B. dense connective
C. epithelial
D. nerve
E. muscle
Cartilage grows in width by
A. Interstitial growth
B. Appositional growth
C. Epiphyseal growth
D. Chondrocytes
ANSWER

Cartilage grows in width by

A. Interstitial growth
B. Appositional growth
C. Epiphyseal growth
D. Chondrocytes
Bone tissue gets its hardness from

A. Calcium salts
B. Collagen fibers
C. Osteocytes
D. Chondrocytes
E. Lacunae
Bone tissue gets its hardness from

A. Calcium salts
B. Collagen fibers
C. Osteocytes
D. Chondrocytes
E. Lacunae
Stratified cuboidal epithelia would be found
A. lining the urinary bladder.
B. lining the ducts that drain sweat glands.
C. lining kidney tubules.
D. lining the stomach.
E. at the surface of the skin.
ANSWER

Stratified cuboidal epithelia would be found

A. lining the urinary bladder.

**B. lining the ducts that drain sweat glands.**

C. lining kidney tubules.

D. lining the stomach.

E. at the surface of the skin.
Bone tissue gets its strength from
A. Collagen fibers
B. Calcium salts
C. Periosteum
D. Osteocytes
E. Canaliculi
Bone tissue gets its strength from

A. Collagen fibers
B. Calcium salts
C. Periosteum
D. Osteocytes
E. Canaliculi
The muscle tissue that shows no striations is _____ muscle.

A. skeletal  
B. cardiac  
C. smooth  
D. voluntary  
E. multinucleated
The muscle tissue that shows no striations is ______ muscle.

A. skeletal
B. cardiac
C. smooth
D. voluntary
E. multinucleated
Close examination of an organ reveals a lining of several layers of cells. The layers do not contain any blood vessels and one surface of the cells is open to the internal cavity of the organ. This tissue is probably

A. epithelium.
B. muscle tissue.
C. connective tissue.
D. neural tissue.
E. fat tissue.
Close examination of an organ reveals a lining of several layers of cells. The layers do not contain any blood vessels and one surface of the cells is open to the internal cavity of the organ. This tissue is probably

A. epithelium.
B. muscle tissue.
C. connective tissue.
D. neural tissue.
E. fat tissue.
Fibroblasts are typical cells of
A. Simple squamous epithelium
B. Dense connective tissue
C. Cardiac muscle tissue
D. Skeletal muscle tissue
E. Nervous tissue
ANSWER

- Fibroblasts are typical cells of
  A. Simple squamous epithelium  
  B. **Dense connective tissue**  
  C. Cardiac muscle tissue  
  D. Skeletal muscle tissue  
  E. Nervous tissue
The type of cell junction that prevents the contents of the intestine from leaking into surrounding tissues is the

A. Adherens junction
B. Gap junction
C. Hemidesmosome
D. Desmosome
E. Tight junction
The type of cell junction that prevents the contents of the intestine from leaking into surrounding tissues is the

A. Adherens junction
B. Gap junction
C. Hemidesmosome
D. Desmosome
E. Tight junction
Tissue that is specialized for the conduction of electrical impulses is _____ tissue.
A. connective
B. neural
C. areolar
D. osseous
E. epithelial
Tissue that is specialized for the conduction of electrical impulses is ______ tissue.

A. connective

B. neural

C. areolar

D. osseous

E. epithelial
Which of the following is typical of an endocrine gland

A. It releases hormones
B. It is made of epithelial tissue
C. It releases its products into ducts that empty onto epithelial surfaces
D. Both A and B are correct
E. Both B and C are correct
ANSWER

Which of the following is typical of an endocrine gland

A. It releases hormones
B. It is made of epithelial tissue
C. It releases its products into ducts that empty onto epithelial surfaces
D. Both A and B are correct
E. Both B and C are correct
Ions and small molecules can travel between cells via
A. Tight junctions
B. Adherens junctions
C. Gap junctions
D. Desmosomes
E. Hemidesmosomes
Ions and small molecules can travel between cells via
A. Tight junctions
B. Adherens junctions
C. **Gap junctions**
D. Desmosomes
E. Hemidesmosomes
A transitional epithelium would be found
A. lining the urinary bladder.
B. lining the ducts that drain sweat glands.
C. lining kidney tubules.
D. lining the stomach.
E. at the surface of the skin.
A transitional epithelium would be found

A. lining the urinary bladder.
B. lining the ducts that drain sweat glands.
C. lining kidney tubules.
D. lining the stomach.
E. at the surface of the skin.
Which of the following tissues provides the greatest protection from abrasion

A. Stratified squamous epithelium
B. Dense regular connective tissue
C. Smooth muscle
D. Simple cuboidal epithelium
E. Elastic cartilage
Which of the following tissues provides the greatest protection from abrasion

A. Stratified squamous epithelium
B. Dense regular connective tissue
C. Smooth muscle
D. Simple cuboidal epithelium
E. Elastic cartilage
Examination of a tissue sample reveals groups of cells united by junctional complexes and interlocking membranes. The cells have one free surface and lack blood vessels. The tissue is most likely ______ tissue.

A. muscle
B. neural
C. epithelial
D. connective
E. adipose
Examination of a tissue sample reveals groups of cells united by junctional complexes and interlocking membranes. The cells have one free surface and lack blood vessels. The tissue is most likely ______ tissue.

A. muscle
B. neural
C. epithelial
D. connective
E. adipose
All of the following are true of neurons, except that
A. when mature, they lose the ability to divide.
B. they conduct a nervous impulse.
C. they are composed of a soma and nerve fibers.
D. they are a specialized type of connective tissue.
E. they are separated from one another by synapses.
ANSWER

➢ All of the following are true of neurons, except that

A. when mature, they lose the ability to divide.
B. they conduct a nervous impulse.
C. they are composed of a soma and nerve fibers.
D. they are a specialized type of connective tissue.
E. they are separated from one another by synapses.
Secretion and absorption are important functions of

A. Adipose tissue
B. Smooth muscle
C. Stratified squamous epithelium
D. Simple cuboidal epithelium
E. Dense regular connective tissue
ANSWER

- Secretion and absorption are important functions of
  A. Adipose tissue
  B. Smooth muscle
  C. Stratified squamous epithelium
  **D. Simple cuboidal epithelium**
  E. Dense regular connective tissue
Microscopic examination of a tissue reveals an open framework of fibers with a large volume of fluid ground substance and elastic fibers. This tissue would most likely have come from the

A. inner wall of a blood vessel.
B. lungs.
C. spleen.
D. tissue that separates skin from underlying muscle.
E. bony socket of the eye.
Microscopic examination of a tissue reveals an open framework of fibers with a large volume of fluid ground substance and elastic fibers. This tissue would most likely have come from the

A. inner wall of a blood vessel.
B. lungs.
C. spleen.
D. tissue that separates skin from underlying muscle.
E. bony socket of the eye.
The heart and blood vessels are lined by
A. pseudostratified columnar epithelium.
B. transitional epithelium.
C. simple cuboidal epithelium.
D. simple columnar epithelium.
E. simple squamous epithelium.
The heart and blood vessels are lined by
A. pseudostratified columnar epithelium.
B. transitional epithelium.
C. simple cuboidal epithelium.
D. simple columnar epithelium.
E. simple squamous epithelium.
Tissue changes with age include all of the following, except:

A. less efficient tissue maintenance.
B. proliferation of epidermal cells.
C. thinner epithelia.
D. more fragile connective tissues.
E. decreased ability to repair damage.
Tissue changes with age include all of the following, *except*

A. less efficient tissue maintenance.

**B. proliferation of epidermal cells.**

C. thinner epithelia.

D. more fragile connective tissues.

E. decreased ability to repair damage.
Passageways that open onto an epithelial surface are called

A. Lumen
B. Ducts
C. Canaliculi
D. Lacunae
E. Glands
Passageways that open onto an epithelial surface are called

A. Lumen
B. Ducts
C. Canaliculi
D. Lacunae
E. Glands
Glands whose cells release their products via exocytosis are called
A. Merocrine
B. Apocrine
C. Holocrine
D. Endocrine
E. Ducts
Glands whose cells release their products via exocytosis are called

A. Merocrine
B. Apocrine
C. Holocrine
D. Endocrine
E. Ducts
A mature cell that can no longer divide or produce matrix is a(n)

A. Fibroblast
B. Chondroblast
C. Osteoblast
D. Osteocyte
A mature cell that can no longer divide or produce matrix is a(n)

A. Fibroblast
B. Chondroblast
C. Osteoblast
D. Osteocyte
You would find pseudostratified columnar epithelium lining the
A. trachea.
B. urinary bladder.
C. secretory portions of the pancreas.
D. surface of the skin.
E. stomach.
ANSWER

➢ You would find pseudostratified columnar epithelium lining the

A. trachea.
B. urinary bladder.
C. secretory portions of the pancreas.
D. surface of the skin.
E. stomach.
The visceral pleura:

A. is the membrane lining surface of the lungs
B. is the membrane lining the wall of the thoracic cavity
C. is the fluid around the lungs
D. is the thinnest portion of the peritoneum
The visceral pleura:

A. is the membrane lining surface of the lungs
B. is the membrane lining the wall of the thoracic cavity
C. is the fluid around the lungs
D. is the thinnest portion of the peritoneum
Fibers in connective tissue that are very tough and resistant to stretching are

A. Collagen fibers
B. Elastic fibers
C. Reticular fibers
D. Areolar fibers
E. Chondroblasts
Fibers in connective tissue that are very tough and resistant to stretching are

A. Collagen fibers
B. Elastic fibers
C. Reticular fibers
D. Areolar fibers
E. Chondroblasts
Glands that secrete hormones into the blood or tissue fluids are

A. endocrine glands.
B. mixed glands.
C. exocrine glands.
D. merocrine glands.
E. holocrine glands.
Glands that secrete hormones into the blood or tissue fluids are

A. endocrine glands.
B. mixed glands.
C. exocrine glands.
D. merocrine glands.
E. holocrine glands.
In connective tissue, the extracellular matrix consists of

A. Ground substance only
B. Ground substance and fibers
C. Fibers only
D. Ground substance, fibers and blast cells
E. Chondroblasts
In connective tissue, the extracellular matrix consists of

A. Ground substance only
B. **Ground substance and fibers**
C. Fibers only
D. Ground substance, fibers and blast cells
E. Chondroblasts
Which of the following is a type of secretion in which some cytoplasm is lost with the product?

A. holocrine
B. merocrine
C. apocrine
D. mucus
E. serous
Which of the following is a type of secretion in which some cytoplasm is lost with the product?

A. holocrine
B. merocrine
C. apocrine
D. mucus
E. serous
The fibrous components of connective tissue are produced by

A. fibroblasts.
B. macrophages.
C. adipocytes.
D. mast cells.
E. melanocytes.
The fibrous components of connective tissue are produced by

A. fibroblasts.
B. macrophages.
C. adipocytes.
D. mast cells.
E. melanocytes.
Watery perspiration is an example of a _____ secretion.

A. merocrine
B. apocrine
C. holocrine
D. serous
E. mucous
Watery perspiration is an example of a ______ secretion.

A. merocrine
B. apocrine
C. holocrine
D. serous
E. mucous
Mesothelium is seen in
A. Kidney tubules
B. Serous membranes
C. The urinary bladder
D. The lining of the heart and blood vessels
E. Skin
ANSWER

- Mesothelium is seen in
  A. Kidney tubules
  B. **Serous membranes**
  C. The urinary bladder
  D. The lining of the heart and blood vessels
  E. Skin
The serous membrane covering the stomach and most of the intestines is called

A. Visceral pericardium
B. Visceral peritoneum
C. Parietal peritoneum
D. Mediastinum
E. Parietal pericardium
The serous membrane covering the stomach and most of the intestines is called

A. Visceral pericardium
B. Visceral peritoneum
C. Parietal peritoneum
D. Mediastinum
E. Parietal pericardium
Cells that store fat are called

A. fibroblasts.
B. fixed macrophages.
C. adipocytes.
D. mast cells.
E. melanocytes.
ANSWER

- Cells that store fat are called
  A. fibroblasts.
  B. fixed macrophages.
  C. **adipocytes**.
  D. mast cells.
  E. melanocytes.
__________ are special membrane junctions between cells where protein molecules in adjacent plasma membranes fuse together. They form an impermeable junction preventing molecules from passing through.

A. Tight junctions
B. Desmosomes
C. Hemidesmosomes
D. Gap junctions
E. Nexus
**ANSWER**

- ___________ are special membrane junctions between cells where protein molecules in adjacent plasma membranes fuse together. They form an impermeable junction preventing molecules from passing through.

A. **Tight junctions**
B. Desmosomes
C. Hemidesmosomes
D. Gap junctions
E. Nexus
The suffix -blast in a cell name indicates a(n)
A. Cell that has ruptured
B. Mature cell with reduced capacity for cell division
C. Cell that is part of an exocrine gland
D. Immature cell that can still divide
E. Cell that is part of the stroma of an organ
The suffix -blast in a cell name indicates a(n)

A. Cell that has ruptured
B. Mature cell with reduced capacity for cell division
C. Cell that is part of an exocrine gland
D. Immature cell that can still divide
E. cell that is part of the stroma of an organ
All of the following are functions of adipose tissue except

A. Support
B. Protection
C. Formation of certain glands
D. Insulation
E. Energy reserve
All of the following are functions of adipose tissue except

A. Support
B. Protection
C. **Formation of certain glands**
D. Insulation
E. Energy reserve
The space between parietal and visceral layers of a membrane is normally filled with
A. Air
B. Blood
C. Serous fluid
D. Synovial fluid
E. Adipose tissue
The space between parietal and visceral layers of a membrane is normally filled with

A. Air
B. Blood
C. **Serous fluid**
D. Synovial fluid
E. Adipose tissue
If fibrosis occurs during tissue repair, then

A. A perfect reconstruction of the injured tissue occurs
B. Rapid replication of mesenchyme cells has occurred
C. The function of the repaired tissue is impaired
D. Only connective tissue was involved in the injury
E. Both B and C are correct
ANSWER

➢ If fibrosis occurs during tissue repair, then

A. A perfect reconstruction of the injured tissue occurs
B. Rapid replication of mesenchyme cells has occurred
C. The function of the repaired tissue is impaired
D. Only connective tissue was involved in the injury
E. Both B and C are correct
Because of its structure, bone is usually classified as a form of

A. Connective tissue
B. Epithelial tissue
C. Muscle tissue
D. Nervous tissue
E. Nonliving tissue
Because of its structure, bone is usually classified as a form of

A. Connective tissue
B. Epithelial tissue
C. Muscle tissue
D. Nervous tissue
E. Nonliving tissue
A bone forming cell is a(n)

A. Osteoblast
B. Osteocyte
C. Chondrocyte
D. Chondroblast
E. Fibroblast
A bone forming cell is a(n)

- A. Osteoblast
- B. Osteocyte
- C. Chondrocyte
- D. Chondroblast
- E. Fibroblast
New cartilage is formed via

A. Appositional growth
B. Interstitial growth
C. Fibrosis
D. Necrosis
ANSWER

- New cartilage is formed via
  A. Appositional growth
  B. Interstitial growth
  C. Fibrosis
  D. Necrosis
Cell and tissue death due to damage or infection is called

A. Apoptosis
B. Necrosis
C. Inflammation
D. Fibrosis
E. Regeneration
Cell and tissue death due to damage or infection is called

A. Apoptosis

B. Necrosis

C. Inflammation

D. Fibrosis

E. Regeneration
Replacement of damaged tissue with the same kind of tissue is called

A. Regeneration
B. Fibrosis
C. Restoration
D. Necrosis
E. Abcess
Replacement of damaged tissue with the same kind of tissue is called

A. Regeneration
B. Fibrosis
C. Restoration
D. Necrosis
E. Abcess
An abscess is best described as
A. An accumulation of pus in an enclosed tissue space
B. A widespread inflammation of the dermis caused by bacterial infection
C. A necrosis occurring because of inadequate circulation
D. A sore which affects the skin near a joint or projecting bone
An abscess is best described as

A. An accumulation of pus in an enclosed tissue space
B. A widespread inflammation of the dermis caused by bacterial infection
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D. A sore which affects the skin near a joint or projecting bone
A bowel obstruction (blockage) after successful abdominal surgery is most likely due to

A. Adhesions
B. Restoration
C. Necrosis
D. Infection
E. Pus
A bowel obstruction (blockage) after successful abdominal surgery is most likely due to

A. Adhesions
B. Restoration
C. Necrosis
D. Infection
E. Pus
The membranes that lines a body cavity that opens to the outside is a(n)

A. Mucous membrane
B. Cutaneous membrane
C. Serous membrane
D. Synovial membrane
The membranes that lines a body cavity that opens to the outside is a(n)

A. Mucous membrane
B. Cutaneous membrane
C. Serous membrane
D. Synovial membrane