

## Exercise 2: Introduction to the Human Body

### Exercise 2: Pre-Lab Questions

1) Which of the following is the best definition of physiology?

- A) the study of the structures of the human body
- B) the study of organ systems and organs of the body
- C) the study of how the body functions and of the work that cells must do to keep the body stable and operating efficiently
- D) the study of the tissues and organs of the human body

Answer: C

Explanation:

- A) Anatomy is the study of the structures of the human body.
- B) Understanding physiology at the cellular level, one will be able apply that knowledge to understanding how physiology functions at each higher level. We always start with the functional unit of each system and work our way up to the overall function of the organism.
- D) This is part of physiology, the study of the tissues and organs; however, when studying physiology it is important to start at the cellular level and work up to the highest level of organization.

2) Which of the following regions corresponds to the lower back?

- A) cephalic
- B) thoracic
- C) lumbar
- D) gluteus

Answer: C

Explanation:

- A) This term refers to the head.
- B) This term refers to the thorax, or chest.
- D) This region refers to the buttock.

3) The lungs lie in the \_\_\_\_\_ cavity.

- A) dorsal
- B) mediastinum
- C) pleural
- D) pericardial

Answer: C

Explanation:

- A) There is no dorsal cavity; the spinal cavity is found on the dorsal side.
- B) The mediastinum separates the pleural cavities.
- D) The pericardial cavity surrounds the heart.

4) Cytology would be best defined as the study of \_\_\_\_\_.

- A) tissue
- B) cells
- C) cell chemistry
- D) the gross structures of the body

Answer: B

Explanation:

- A) Histology is the study of tissues.
- C) Cytology is the anatomical study of cells.
- D) Cytology is the microscopic study of cells.

5) A cut that separates anterior and posterior structures is \_\_\_\_\_.

- A) transverse
- B) frontal
- C) midsagittal
- D) parasagittal

Answer: B

Explanation:

- A) This is a cut that separates superior from inferior structures.
- C) This is a cut that divides into right and left equal halves.
- D) This is a cut that separates the body into nearly equal right and left halves.

## Exercise 2: Post-Lab Questions

1) \_\_\_\_\_ is the study of cells.

- A) Histology
- B) Cytology
- C) Physiology
- D) Gross anatomy

Answer: B

Explanation:

- A) Histology is the study of tissues.
- C) Physiology is the study of how the body functions.
- D) Gross anatomy is the study of large parts of the body such as muscles and bones.

2) The maintenance of a relatively steady internal environment through physiology work is termed \_\_\_\_\_.

- A) positive feedback
- B) homeostasis
- C) negative feedback
- D) integration

Answer: B

Explanation:

- A) This type of feedback system amplifies the effects of a system.
- C) This type of feedback system negates the effects of a system.
- D) The central nervous system integrates information from the sensory nervous system and then sends out commands through the motor nervous system.

3) The heart is found at what level of organization of the cardiovascular system?

- A) chemical
- B) tissue
- C) organ
- D) cellular

Answer: C

Explanation:

- A) Protein contractile fibers are at the chemical level of organization.
- B) Cardiac muscle is a type of muscle tissue.
- D) Cardiac muscle cells are at the cellular level of organization.

4) Histology would be best defined as a study of \_\_\_\_\_.

- A) cell chemistry
- B) cells
- C) tissues
- D) the gross structures of the body

Answer: C

Explanation:

- A) Cell chemistry would be included in the physiological study of cells.
- B) Cytology is the study of cells.
- D) Gross anatomy studies the larger structures of the body that can be seen without the aid of a microscope.

5) Which of the following is the best definition of physiology?

- A) the study of the tissues and organs of the human body
- B) the study of body structures
- C) the study of how the body functions and of the work that cells must do to keep the body stable and operating efficiently
- D) the study of human growth and development

Answer: C

Explanation:

- A) This is the anatomical study of just the tissues and organs.
- B) Anatomy is the study of body structures.
- D) This is the study of development and reproduction.

6) Which structure is medial to the eyes?

- A) ears
- B) nose
- C) eyebrows
- D) shoulders

Answer: B

Explanation:

- A) The ears are lateral to the eyes.
- C) The eyebrows are superior to the eyes.
- D) The shoulders are lateral to the eyes.

7) All the following are found on the ventral side of the body EXCEPT the \_\_\_\_\_.

- A) shoulder blade
- B) navel
- C) knees
- D) sternum

Answer: A

Explanation:

- B) The navel is found on the ventral side of the body.
- C) The knees are found on the ventral side of the body.
- D) The sternum is found on the ventral side of the body.

8) All the following structures are superior to the hips EXCEPT the \_\_\_\_\_.

- A) shoulders
- B) thighs
- C) head
- D) stomach

Answer: B

Explanation:

- A) The shoulders are superior to the hips.
- C) The head is superior to the hips.
- D) The stomach is superior to the hips.

9) All the following structures are inferior to the hips EXCEPT the \_\_\_\_\_.

- A) knees
- B) thighs
- C) waist
- D) feet

Answer: C

Explanation:

- A) The knees are inferior to the hips.
- B) The thighs are inferior to the hips.
- D) The feet are inferior to the hips.

10) All the following describe proper anatomical position EXCEPT the \_\_\_\_\_.

- A) eyes are straight ahead
- B) feet are facing forward
- C) palms of the hands are facing backward
- D) palms of the hands are facing forward

Answer: C

Explanation:

- A) The eyes are straight ahead in proper anatomical position.
- B) The feet face forward in proper anatomical position.
- D) The palms of the hands face forward in proper anatomical position.

11) The following are all regions of the upper limb EXCEPT \_\_\_\_\_.

- A) pollex
- B) axillary
- C) brachial
- D) antecubital

Answer: A

Explanation:

- B) Axillary is a region of the upper limb.
- C) Brachial is a region of the upper limb.
- D) Antecubital is a region of the upper limb.

12) The stomach is found in which abdominopelvic quadrant?

- A) left upper quadrant
- B) right lower quadrant
- C) right upper quadrant
- D) left lower quadrant

Answer: A

Explanation:

- B) The lower quadrant contains lower structures such as the large intestine and appendix.
- C) The right upper quadrant houses the gallbladder.
- D) The left lower quadrant houses part of the large intestine and part of the urinary bladder.

13) All of the following are inferior to the umbilical region EXCEPT the \_\_\_\_\_.

- A) urinary bladder
- B) hypogastric region
- C) pubic region
- D) epigastric region

Answer: D

Explanation:

- A) The urinary bladder is inferior to the umbilical region.
- B) The hypogastric region is inferior to the umbilical region.
- C) The pubic region is inferior to the umbilical region.

14) There are \_\_\_\_\_ abdominopelvic regions.

- A) seven
- B) eight
- C) nine
- D) ten

Answer: C

Explanation:

- A) There are more than seven abdominopelvic regions.
- B) There are more than eight abdominopelvic regions.
- D) There are more than ten abdominopelvic regions.

15) A \_\_\_\_\_ section divides a body or organ into right and left portions.

- A) transverse
- B) frontal
- C) sagittal
- D) coronal

Answer: C

Explanation:

- A) A transverse section is perpendicular to the vertical orientation of the body.
- B) Frontal sections separates anterior and posterior structures.
- D) A coronal section separates anterior and posterior structures.

16) A cut that passes parallel through the long axis of the body and divides the body into equal left and right halves is known as a \_\_\_\_\_.

- A) coronal
- B) parasagittal
- C) frontal
- D) midsagittal

Answer: D

Explanation:

- A) A coronal cut is the same as a frontal cut, and separates the anterior from the posterior.
- B) A parasagittal cut passes through the long axis of the body and divides the body into nearly equal halves.
- C) A frontal cut separates the anterior from the posterior.

17) What type of section is perpendicular to the vertical orientation of the body?

- A) transverse
- B) midsagittal
- C) frontal
- D) oblique

Answer: A

Explanation:

- B) A midsagittal section is a vertical section.
- C) A frontal section is a vertical section.
- D) An oblique section is at an angle to the body.

18) Which type of section would separate superior and inferior structures?

- A) transverse
- B) sagittal
- C) frontal
- D) coronal

Answer: A

Explanation:

- B) A sagittal section would cut the head in half.
- C) A frontal section would separate the front of the head from the back of the head.
- D) A coronal section would separate the front of the head from the back of the head.

19) Which type of section would separate the anterior and posterior?

- A) transverse
- B) frontal
- C) parasagittal
- D) midsagittal

Answer: B

Explanation:

- A) Transverse sections separate superior from inferior structures.
- C) Parasagittal sections separate structures into unequal sections.
- D) A midsagittal section would separate structures into equal halves.

20) A \_\_\_\_\_ section passes through the long axis of the body and divides the body into nearly equal halves.

- A) parasagittal
- B) midsagittal
- C) transverse
- D) oblique

Answer: A

Explanation:

- B) A midsagittal section would separate the body into equal halves.
- C) A transverse section would separate the superior structures from the inferior structures.
- D) An oblique section would separate the body at an angle.

21) The ventral body cavity is divided into two major cavities, the superior \_\_\_\_\_ cavity and the inferior \_\_\_\_\_ cavity.

- A) mediastinum; abdominal
- B) thoracic; abdominopelvic
- C) abdominal; pelvic
- D) thoracic; pericardial

Answer: B

Explanation:

- A) The mediastinum is part of the thoracic cavity, and the abdominal cavity is part of the abdominopelvic cavity.
- C) The abdominal and pelvic cavities make up the abdominopelvic cavity.
- D) The pericardial cavity is part of the thoracic cavity.

22) The layer of the serous membrane that is directly attached to the internal organ is the \_\_\_\_\_.

- A) peritoneum
- B) parietal layer
- C) pericardium
- D) visceral layer

Answer: D

Explanation:

- A) The peritoneum is a serous membrane that is found in the abdominal cavity.
- B) The parietal layer is the outermost layer of a serous membrane.
- C) The pericardium is a serous membrane that surrounds the heart.

23) The serous membrane of the lungs is called the \_\_\_\_\_.

- A) pericardium
- B) pleura
- C) peritoneum
- D) periosteum

Answer: B

Explanation:

- A) The pericardium surrounds the heart.
- C) The peritoneum surrounds the digestive organs.
- D) The periosteum is the layer of connective tissue that surrounds bones.

24) What is the function of the serous fluid?

- A) increase friction
- B) reduce friction
- C) supplies nutrients to the organs
- D) absorb shock when the organs move

Answer: B

Explanation:

- A) The fluid allows the layers of membrane to slide over each other with ease.
- C) Blood is the provider of nutrients to the organs.
- D) The function is to allow the two layers to smoothly slide over one another when the organs move.

25) Which two cavities are continuous with each other?

- A) pericardial and pleural
- B) thoracic and abdominopelvic
- C) the two pleural cavities
- D) cranial and spinal

Answer: D

Explanation:

- A) The pericardial and pleural cavities are three separate cavities.
- B) The thoracic and abdominopelvic cavities are divided by the diaphragm.
- C) The pleural cavities are two separate cavities.

## **Pig Dissection Exercise 2: Pig Nervous System**

### **Pig Dissection Exercise 2: Pre-Lab Questions**

1) Both pigs and humans have pairs of spinal nerves extending from the spinal cord. While pigs have between 38 to 40 pairs, humans typically have \_\_\_\_\_ pairs.

- A) 6
- B) 12
- C) 24
- D) 31

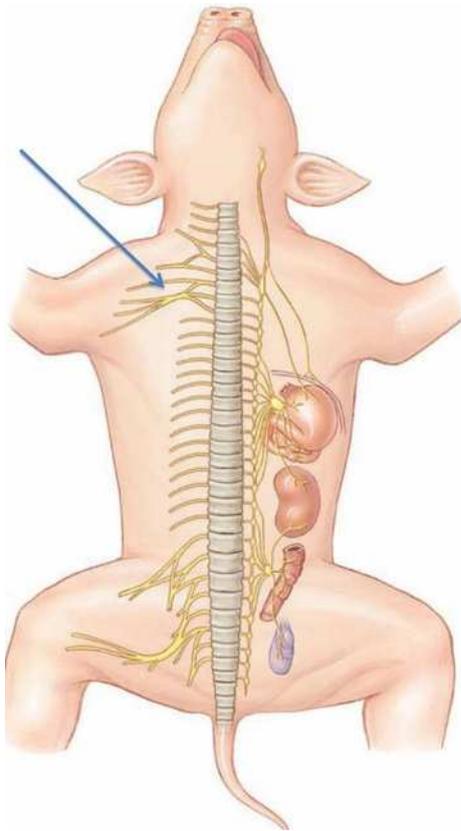
Answer: D

Explanation:

- A) Humans have 31 pairs of spinal nerves; pigs have 38 to 40 pairs, depending on whether some of the distal nerves have fused.
- B) Humans have 31 pairs of spinal nerves; pigs have 38 to 40 pairs, depending on whether some of the distal nerves have fused.

C) Humans have 31 pairs of spinal nerves; pigs have 38 to 40 pairs, depending on whether some of the distal nerves have fused.

2) Identify the nerve plexus at the tip of the arrow in the following figure.



- A) sacral plexus
- B) brachial plexus
- C) lumbar plexus
- D) cervical plexus

Answer: B

Explanation:

A) The sacral plexus is the neural network that supplies the muscles and the structures of the hip and hindlimb. The brachial plexus (shown) is a network formed by the intertwining of cervical nerves C6, C7, and C8 and thoracic nerve T1. This plexus innervates muscles and other structures of the shoulder, forelimb, and thoracic wall.

C) The brachial plexus (shown) is a network formed by the intertwining of cervical nerves C6, C7, and C8 and thoracic nerve T1. This plexus innervates muscles and other structures of the shoulder, forelimb, and thoracic wall.

D) The brachial plexus (shown) is a network formed by the intertwining of cervical nerves C6, C7, and C8 and thoracic nerve T1. This plexus innervates muscles and other structures of the shoulder, forelimb, and thoracic wall.

3) The sciatic nerve extends from which nerve plexus?

- A) cervical
- B) sacral
- C) brachial

Answer: B

Explanation:

A) The large sciatic nerve supplies the muscles of the hindlimb and extends from the sacral plexus.

C) The large sciatic nerve supplies the muscles of the hindlimb and extends from the sacral plexus. The brachial plexus is a network formed by the intertwining of cervical nerves C6, C7, and C8 and thoracic nerve T1. This plexus innervates muscles and other structures of the shoulder, forelimb, and thoracic wall.

4) To dissect the spinal cord, you must first cut through this, the outermost layer of the meninges.

- A) dura mater
- B) arachnoid mater
- C) pia mater

Answer: A

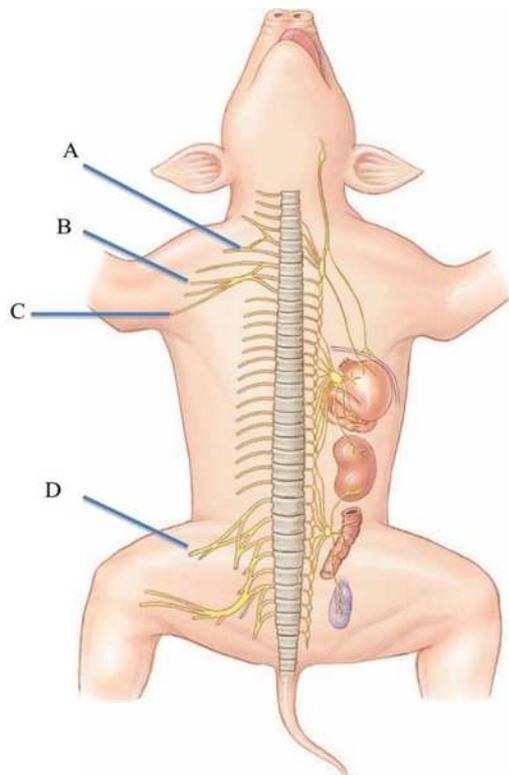
Explanation:

B) The arachnoid mater is the middle layer of the meninges.

C) The pia mater is the delicate innermost layer of the meninges, which lays directly on the surface of the spinal cord.

## Pig Dissection Exercise 2: Post-Lab Questions

1) Identify the ulnar nerve in the following figure.



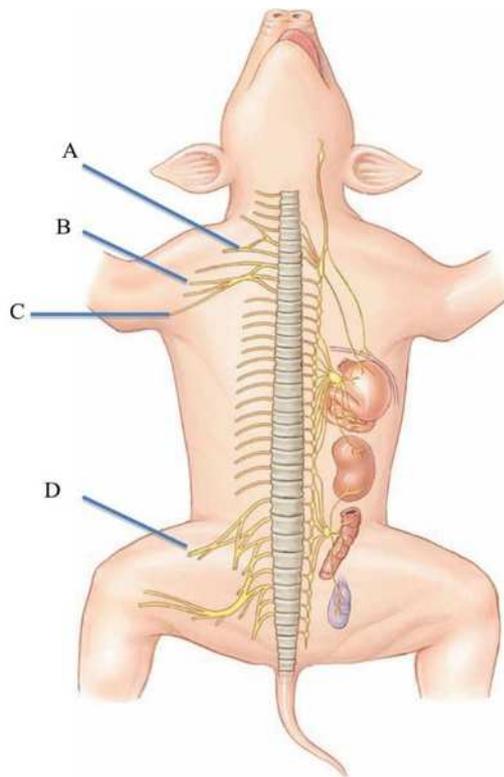
- A) A
- B) B
- C) C
- D) D

Answer: C

Explanation:

- A) Letter "A" is marking the suprascapular nerve.
- B) Letter "B" is marking the radial nerve.
- D) Letter "D" is marking the femoral nerve.

2) Identify the radial nerve in the following figure.



- A) A
- B) B
- C) C
- D) D

Answer: B

Explanation:

A) Letter "A" is marking the suprascapular nerve.

C) Letter "C" is marking the ulnar nerve.

D) Letter "D" is marking the femoral nerve.

3) Which nerve supplies the coracobrachial and biceps brachii muscles of the ventral forelimb and the skin of the forelimb?

- A) radial nerve
- B) musculocutaneous nerve
- C) median nerve
- D) ulnar nerve

Answer: B

Explanation:

A) The radial nerve supplies the triceps brachii muscle and other dorsal muscles of the forelimb.

C) The median nerve supplies the muscles of the ventral antebrachium of the forelimb.

D) The ulnar nerve supplies the muscles of the antebrachium.

4) Damage to the radial nerve would impact which muscle?

- A) triceps brachii
- B) biceps brachii
- C) coracobrachialis
- D) pectoralis

Answer: A

Explanation:

B) The musculocutaneous nerve supplies the coracobrachial and biceps brachii muscles of the ventral forelimb and the skin of the forelimb.

C) The musculocutaneous nerve supplies the coracobrachial and biceps brachii muscles of the ventral forelimb and the skin of the forelimb.

D) The ventral thoracic nerve supplies the pectoralis muscle.

5) Which of these is NOT a nerve of the brachial plexus?

- A) musculocutaneous nerve
- B) radial nerve
- C) ulnar nerve
- D) median nerve
- E) phrenic nerve

Answer: E

Explanation:

A) The phrenic nerve originates from the cervical region.

B) The phrenic nerve originates from the cervical region.

C) The phrenic nerve originates from the cervical region.

D) The phrenic nerve originates from the cervical region.

6) Which nerve extends along the lateral side of the hindlimb?

- A) musculocutaneous nerve
- B) tibial nerve
- C) median nerve
- D) common fibular nerve

Answer: D

Explanation:

A) The musculocutaneous nerve is superior to the radial nerve, and supplies the coracobrachial and biceps brachii muscles of the ventral forelimb and the skin of the forelimb.

B) The tibial nerve extends along the medial side of the hindlimb.

C) The median nerve follows the brachial artery into the ventral forelimb and supplies the muscles of the ventral antebrachium of the forelimb.

7) The common fibular nerve and the tibial nerve branch from which nerve?

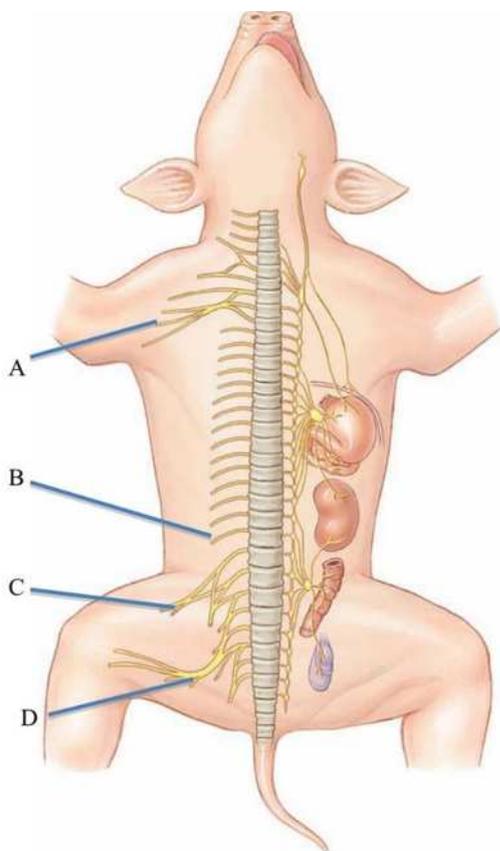
- A) musculocutaneous nerve
- B) femoral nerve
- C) ulnar nerve
- D) sciatic nerve

Answer: D

Explanation:

- A) The musculocutaneous nerve branches from the brachial plexus and innervates the forelimb.
- B) The sciatic nerve branches into two smaller nerves, the tibial and common fibular nerve.
- C) The ulnar nerve branches from the brachial plexus and innervates the forelimb.

8) Identify the sciatic nerve in the following figure.



- A) A
- B) B
- C) C
- D) D

Answer: D

Explanation:

- A) Letter "A" is marking the median nerve.
- B) Letter "B" is marking a lumbar nerve.
- C) Letter "C" is marking the femoral nerve.

9) List the layers of the meningeal membranes surrounding the brain and spinal cord from most superficial to deepest:

1. Pia mater
2. Arachnoid mater
3. Dura mater

- A) 3, 2, 1
- B) 1, 2, 3
- C) 1, 3, 2
- D) 3, 1, 2
- E) 2, 3, 1

Answer: A

Explanation:

B) The dura mater (3) is the outermost meninx. The arachnoid mater (2) is the middle meninx and the pia mater (1) is the innermost layer that lies directly on the surface of the brain and spinal cord.

C) The dura mater (3) is the outermost meninx. The arachnoid mater (2) is the middle meninx and the pia mater (1) is the innermost layer that lies directly on the surface of the brain and spinal cord.

D) The dura mater (3) is the outermost meninx. The arachnoid mater (2) is the middle meninx and the pia mater (1) is the innermost layer that lies directly on the surface of the brain and spinal cord.

E) The dura mater (3) is the outermost meninx. The arachnoid mater (2) is the middle meninx and the pia mater (1) is the innermost layer that lies directly on the surface of the brain and spinal cord.

10) In the spinal cord, the \_\_\_\_\_ matter is deep to the \_\_\_\_\_ matter.

- A) white; gray
- B) gray; white

Answer: B

Explanation:

A) The inner gray horns are surrounded by the white columns in the spinal cord.

11) The spinal nerves are formed by the \_\_\_\_\_.

- A) dorsal and ventral roots
- B) pia mater
- C) dura mater

Answer: A

Explanation:

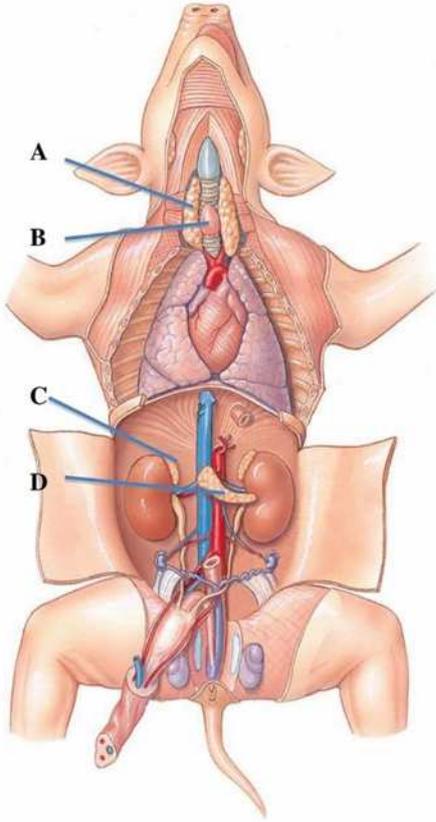
B) The pia mater is the innermost meninx that lies directly on the spinal cord and brain; it does not contain nerve tissue.

C) The dura mater is the outermost meninx; it does not contain nerve tissue.

## Pig Dissection Exercise 3: Pig Endocrine System

### Pig Dissection Exercise 3: Pre-Lab Questions

1) Identify the thymus gland in the following figure.



- A) A
- B) B
- C) C
- D) D

Answer: A

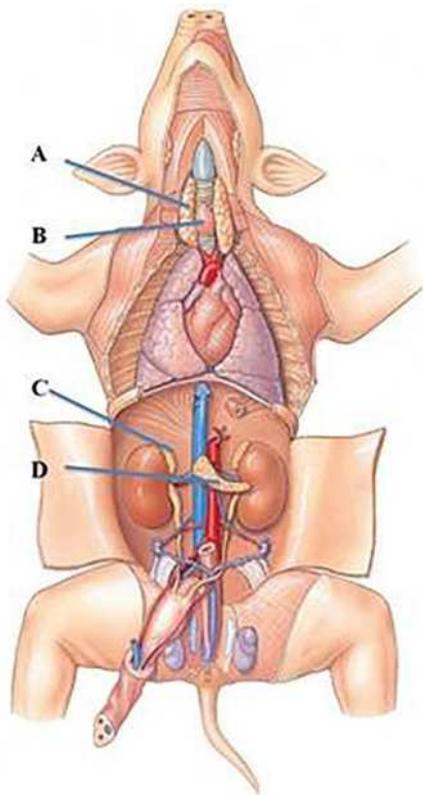
Explanation:

B) The thyroid gland is labeled "B."

C) The adrenal gland is labeled "C."

D) The pancreas is labeled "D."

2) Identify the adrenal gland in the following figure.



- A) A
- B) B
- C) C
- D) D

Answer: C

Explanation:

- A) The thymus gland is labeled "A."
- B) The thyroid gland is labeled "B."
- D) The pancreas is labeled "D."

3) The thyroid gland secretes which of these hormones?

- A) renin and erythropoietin
- B) insulin and glucagon
- C) mineralocorticoids, glucocorticoids, and androgens
- D) estrogen and testosterone
- E) T<sub>3</sub>, T<sub>4</sub>, and calcitonin

Answer: E

Explanation:

- A) The kidneys produce renin and erythropoietin.
- B) Insulin and glucagon are produced and secreted by the pancreas.
- C) Mineralocorticoids, glucocorticoids, and androgens are secreted by the adrenal glands.
- D) The gonads secrete estrogen and testosterone.

4) Which hormone functions to increase glucose levels in the blood?

- A) glucagon
- B) insulin

- C) thymosin
- D) calcitonin

Answer: A

Explanation:

- B) The hormone insulin decreases the amount of blood sugar by stimulating cellular intake of sugar.
- C) Thymosin is a hormone that stimulates the development of T lymphocytes.
- D) The hormone calcitonin decreases blood plasma calcium ion concentration.

## **Cat Dissection Exercise 2: Cat Nervous System**

### **Cat Dissection Exercise 2: Pre-Lab Questions**

1) Both cats and humans have pairs of spinal nerves extending from the spinal cord. While cats have between 38 to 40 pairs, humans typically have \_\_\_\_\_ pairs.

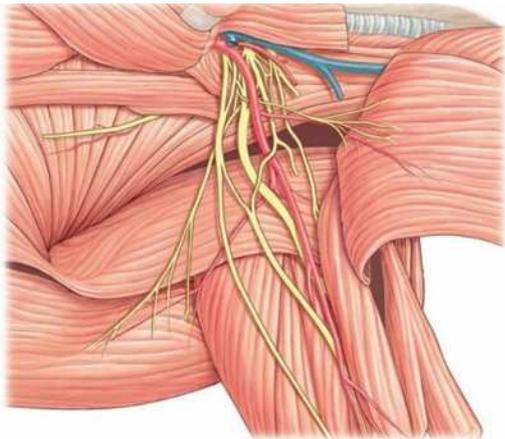
- A) 6
- B) 12
- C) 24
- D) 31

Answer: D

Explanation:

- A) Humans have 31 pairs of spinal nerves; cats have 38 to 40 pairs, depending on whether some of the distal nerves have fused.
- B) Humans have 31 pairs of spinal nerves; cats have 38 to 40 pairs, depending on whether some of the distal nerves have fused.
- C) Humans have 31 pairs of spinal nerves; cats have 38 to 40 pairs, depending on whether some of the distal nerves have fused.

2) Which nerve plexus is shown in this figure?



- A) lumbar plexus
- B) sacral plexus
- C) brachial plexus
- D) cervical plexus

Answer: C

Explanation:

A) The brachial plexus (shown) is a network formed by the intertwining of cervical nerves C6, C7, and C8 and thoracic nerve T1. This plexus innervates muscles and other structures of the shoulder, forelimb, and thoracic wall.

B) The sacral plexus is the neural network that supplies the muscles, and also the structures of the hip and hindlimb. The brachial plexus (shown) is a network formed by the intertwining of cervical nerves C6, C7, and C8 and thoracic nerve T1. This plexus innervates muscles and other structures of the shoulder, forelimb, and thoracic wall.

D) The brachial plexus (shown) is a network formed by the intertwining of cervical nerves C6, C7, and C8 and thoracic nerve T1. This plexus innervates muscles and other structures of the shoulder, forelimb, and thoracic wall.

3) The sciatic nerve extends from which nerve plexus?

- A) cervical
- B) sacral
- C) brachial

Answer: B

Explanation:

A) The large sciatic nerve supplies the muscles of the hindlimb and extends from the sacral plexus.

C) The large sciatic nerve supplies the muscles of the hindlimb and extends from the sacral plexus. The brachial plexus is a network formed by the intertwining of cervical nerves C6, C7, and C8 and thoracic nerve T1. This plexus innervates muscles and other structures of the shoulder, forelimb, and thoracic wall.

4) To dissect the spinal cord, you must first cut through this, the outermost layer of the meninges.

A) dura mater

B) arachnoid mater

C) pia mater

Answer: A

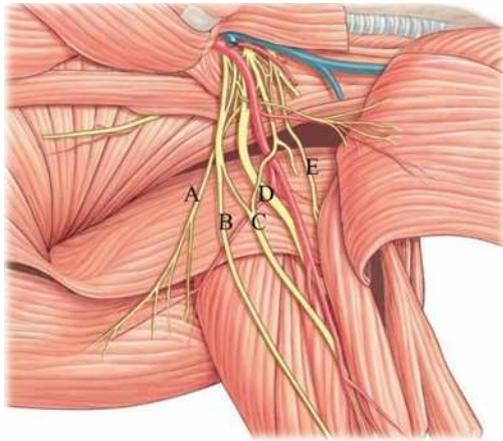
Explanation:

B) The arachnoid mater is the middle layer of the meninges.

C) The pia mater is the delicate innermost layer of the meninges, which lies directly on the surface of the spinal cord.

## Cat Dissection Exercise 2: Post-Lab Questions

1) Identify the radial nerve in the following image.



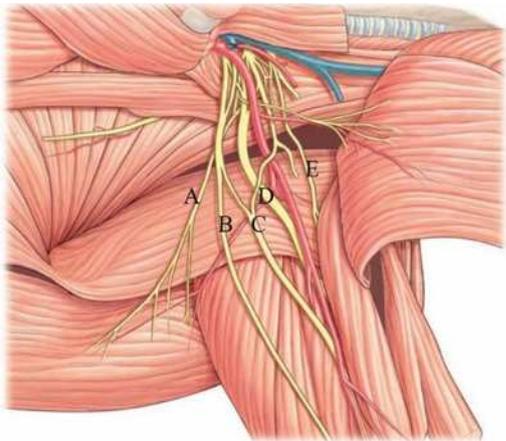
- A) A
- B) B
- C) C
- D) D
- E) E

Answer: D

Explanation:

- A) Letter "A" is marking the dorsal thoracic nerve.
- B) Letter "B" is marking the ulnar nerve.
- C) Letter "C" is marking the median nerve.
- E) Letter "E" is the musculocutaneous nerve.

2) Identify the median nerve in the following image.



- A) A
- B) B
- C) C
- D) D
- E) E

Answer: C

Explanation:

- A) Letter "A" is marking the dorsal thoracic nerve.
- B) Letter "B" is marking the ulnar nerve.
- D) Letter "D" is marking the radial nerve.
- E) Letter "E" is marking the musculocutaneous nerve.

3) Which nerve supplies the coracobrachial and biceps brachii muscles of the ventral forelimb and the skin of the forelimb?

- A) musculocutaneous nerve
- B) radial nerve
- C) median nerve
- D) ulnar nerve

Answer: A

Explanation:

- B) The radial nerve supplies the triceps brachii muscle and other dorsal muscles of the forelimb.
- C) The median nerve supplies the muscles of the ventral antebrachium of the forelimb.
- D) The ulnar nerve supplies the muscles of the antebrachium.

4) Damage to the radial nerve would impact which muscle?

A) coracobrachialis

B) biceps brachii

C) triceps brachii

D) pectoralis

Answer: C

Explanation:

A) The musculocutaneous nerve supplies the coracobrachial and biceps brachii muscles of the ventral forelimb and the skin of the forelimb.

B) The musculocutaneous nerve supplies the coracobrachial and biceps brachii muscles of the ventral forelimb and the skin of the forelimb.

D) The ventral thoracic nerve supplies the pectoralis muscle.

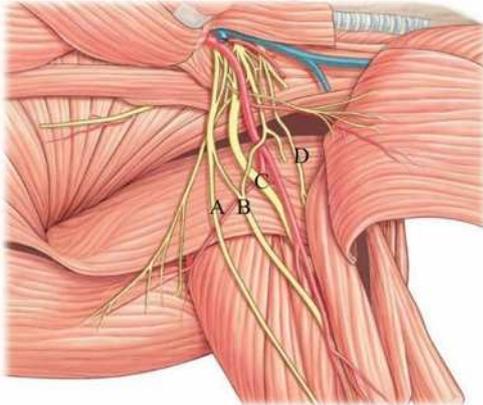
5) Which nerve is the most posterior nerve of the brachial plexus?

- A) ulnar nerve
- B) radial nerve
- C) brachial nerve
- D) median nerve

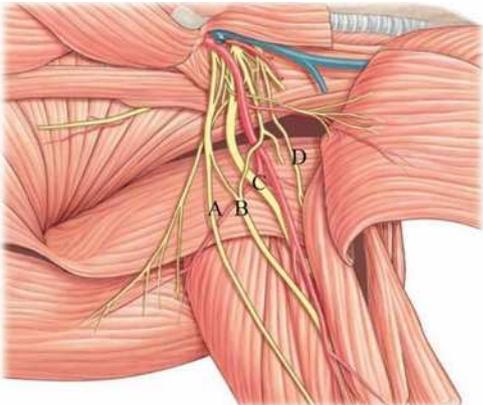
Answer: A

Explanation:

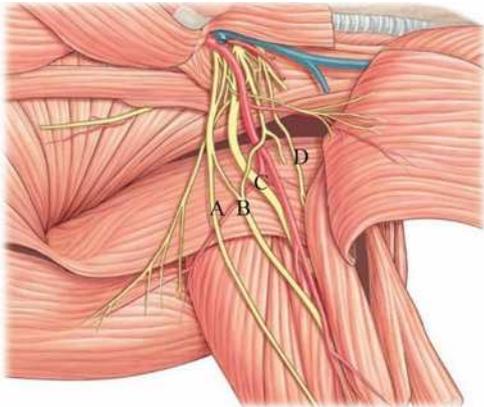
B) Note the ulnar nerve, labeled "A," is the most posterior nerve of the brachial plexus. Moving anteriorly from the ulnar nerve is the median nerve (B), the radial nerve (C), and the musculocutaneous nerve (D).



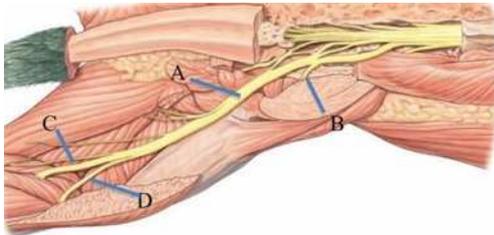
C) Note the ulnar nerve, labeled "A," is the most posterior nerve of the brachial plexus. Moving anteriorly from the ulnar nerve is the median nerve (B), the radial nerve (C), and the musculocutaneous nerve (D).



D) Note the ulnar nerve, labeled "A," is the most posterior nerve of the brachial plexus. Moving anteriorly from the ulnar nerve is the median nerve (B), the radial nerve (C), and the musculocutaneous nerve (D).



6) Identify the common fibular nerve in the following figure.



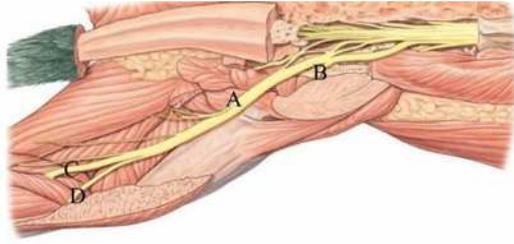
- A) A
- B) B
- C) C
- D) D

Answer: D

Explanation:

- A) The sciatic nerve is marked "A."
- B) The femoral nerve is marked "B."
- C) The tibial nerve is marked "C."

7) Identify the sciatic nerve in the following figure.



- A) A
- B) B
- C) C
- D) D

Answer: A

Explanation:

B) The femoral nerve is marked "B."

C) The tibial nerve is marked "C."

D) The common fibular nerve is marked "D."

8) Which nerve extends along the lateral side of the hindlimb?

- A) median nerve
- B) tibial nerve
- C) common fibular nerve
- D) musculocutaneous nerve

Answer: C

Explanation:

A) The median nerve follows the brachial artery into the ventral forelimb and supplies the muscles of the ventral antebrachium of the forelimb.

B) The tibial nerve extends along the medial side of the hindlimb.

D) The musculocutaneous nerve is superior to the radial nerve, and supplies the coracobrachial and biceps brachii muscles of the ventral forelimb and the skin of the forelimb.

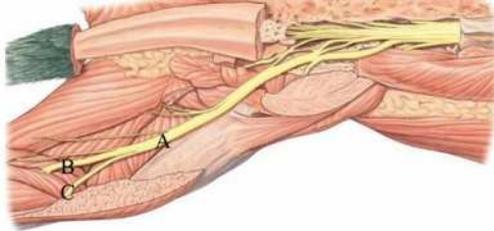
9) The common fibular nerve and the tibial nerve branch from which nerve?

- A) sciatic nerve
- B) femoral nerve

Answer: A

Explanation:

B)



The sciatic nerve (A) branches into two smaller nerves, the tibial (B) and common fibular (C) nerve.

10) List the layers of the meningeal membranes surrounding the brain and spinal cord from most superficial to deepest:

- 1. Pia mater
- 2. Arachnoid mater
- 3. Dura mater

A) 3, 2, 1

B) 1, 2, 3

C) 1, 3, 2

D) 3, 1, 2

E) 2, 3, 1

Answer: A

Explanation:

B) The dura mater (3) is the outermost meninx. The arachnoid mater (2) is the middle meninx and the pia mater (1) is the innermost layer that lays directly on the surface of the brain and spinal cord.

C) The dura mater (3) is the outermost meninx. The arachnoid mater (2) is the middle meninx and the pia mater (1) is the innermost layer that lies directly on the surface of the brain and spinal cord.

D) The dura mater (3) is the outermost meninx. The arachnoid mater (2) is the middle meninx and the pia mater (1) is the innermost layer that lies directly on the surface of the brain and spinal cord.

E) The dura mater (3) is the outermost meninx. The arachnoid mater (2) is the middle meninx and the pia mater (1) is the innermost layer that lies directly on the surface of the brain and spinal cord.

11) In the spinal cord the \_\_\_\_\_ matter is deep to the \_\_\_\_\_ matter.

A) gray; white

B) white; gray

Answer: A

Explanation:

B) The inner gray horns are surrounded by the white columns in the spinal cord.

12) The spinal nerves are formed by the \_\_\_\_\_.

A) dorsal and ventral roots

B) pia mater

C) dura mater

Answer: A

Explanation:

B) The pia mater is the innermost meninx that lies directly on the spinal cord and brain; it does not contain nerve tissue.

C) The dura mater is the outermost meninx; it does not contain nerve tissue.