

The Full File have 1-96 Pages : Cat Dissection Exercises

***Laboratory Manual for Anatomy and Physiology, 6e (Wood)
Cat Dissection Exercises***

Cat Dissection Exercise 1: Cat Muscular System

Cat Dissection Exercise 1: Pre-Lab Questions

1) Which term refers to the ventral surface of a four-legged animal?

- A) inferior
- B) superior
- C) caudal
- D) cephalic

Answer: A

Explanation:

B) The anatomical position for a four-legged animal is all four limbs on the ground. Superior refers to the back (dorsal) surface.

C) The anatomical position for a four-legged animal is all four limbs on the ground. Caudal refers to posterior structures or those toward the tail.

D) The anatomical position for a four-legged animal is all four limbs on the ground. Cephalic refers to being toward the front or anterior region of the animal.

2) Cats have all of the same muscles as humans, and therefore they are an ideal specimen to study.

- A) True
- B) False

Answer: A

Explanation:

B) While some muscles found in four-legged animals are lacking in humans, and some muscles that are fused in humans occur as separate muscles in four-legged animals, studying muscles in four-legged animals is an excellent way to learn about human muscles.

3) Which term refers to the tail end of a four-legged animal?

- A) superior
- B) caudal
- C) inferior
- D) cephalic

Answer: B

Explanation:

A) The term superior refers to the back (dorsal) surface of a four-legged animal.

C) The term inferior refers to the ventral surface of a four-legged animal.

D) The term cephalic refers to being toward the front or anterior region of the animal.

4) Which group of muscles covers the dorsal surface of the neck and scapula?

- A) trapezius group
- B) deltoid group
- C) rhomboideus group
- D) pectoralis group

Answer: A

Explanation:

- B) The deltoid group comprises the shoulder muscles lateral to the trapezius group.
- C) The rhomboideus group connects the spinous processes of cervical and thoracic vertebrae with the vertebral border of the scapula.
- D) The pectoralis group consists of the large muscles covering the ventral surface of the chest.

5) Which group of muscles covers the ventral surface of the chest?

- A) trapezius group
- B) deltoid group
- C) rhomboideus group
- D) pectoralis group

Answer: D

Explanation:

- A) The trapezius group consists of the muscles covering the dorsal surface of the neck and scapula.
- B) The deltoid group comprises the shoulder muscles lateral to the trapezius group.
- C) The rhomboideus group connects the spinous processes of cervical and thoracic vertebrae with the vertebral border of the scapula.

Cat Dissection Exercise 1: Post-Lab Questions

1) Which statement regarding the storage of your cat is most correct?

- A) The cat should be stored in a sealed bag covered in distilled water.
- B) The cat should be stored in a sealed bag with exposed muscles covered with paper towels that have been dampened with fixative.
- C) The cat should be dried and stored in a sealed bag.
- D) The cat should be stored on the dissecting pan without any coverings.

Answer: B

Explanation:

- A) Never rinse the cat with water; doing so will remove the preservative and promote the growth of mold. Always remoisten the body, skin, and other wrappings with fixative prior to storage.
- C) Always remoisten the body, skin, and other wrappings with fixative prior to storage, and then place the cat in a sealed bag.
- D) Always remoisten the body, skin, and other wrappings with fixative prior to storage, and then place the cat in a sealed bag.

2) To begin dissecting the cat, place it _____ side down on the dissecting tray.

- A) dorsal
- B) caudal
- C) cephalic
- D) ventral

Answer: A

Explanation:

- B) Caudal refers to the tail end of the cat. The first incision will be made superficially into the ventral surface. Thus, the cat should be laying dorsal side down.
- C) Cephalic refers to the anterior end of the cat. The first incision will be made superficially into the ventral surface. Thus, the cat should be laying dorsal side down.
- D) The first incision will be made superficially into the ventral (abdominal) surface. Thus, the cat should be laying dorsal side down.

3) Where should the first incision be made when dissecting a cat?

- A) on the lateral side of the ventral surface near the neck
- B) on the midline of the ventral surface just anterior to the tail
- C) on the lateral side of the dorsal surface near the neck
- D) on the midline of the dorsal surface just anterior to the tail

Answer: B

Explanation:

- A) The first incision should be a short and shallow incision on the midline of the ventral surface just anterior to the tail.
- B) The first incision should be a short and shallow incision on the midline of the ventral surface just anterior to the tail.
- C) The first incision should be a short and shallow incision on the midline of the ventral surface just anterior to the tail.
- D) The first incision should be a short and shallow incision on the midline of the ventral surface just anterior to the tail.

4) How should the skin be separated from the underlying fascia?

A) use the pointed end of a pair of scissors to separate the skin from the underlying muscle and connective tissues

B) use the scalpel to separate the skin from the underlying muscle and connective tissues

C) use your fingers or a blunt probe to separate the skin from the underlying muscle and connective tissues

Answer: C

Explanation:

A) To remove the skin from the underlying fascia, you should not use sharp tools as this may cut or damage the muscles.

B) To remove the skin from the underlying fascia, you should not use sharp tools as this may cut or damage the muscles.

5) In cats, the trapezius group of muscles is composed of three distinct muscles. How many muscle(s) make up the trapezius in humans?

A) two

B) one

C) three

D) four

Answer: B

Explanation:

A) The trapezius group of muscles covers the dorsal surface of the neck and the scapula. The single trapezius in humans occurs as three distinct muscles in cats.

C) The trapezius group of muscles covers the dorsal surface of the neck and the scapula. The single trapezius in humans occurs as three distinct muscles in cats.

D) The trapezius group of muscles covers the dorsal surface of the neck and the scapula. The single trapezius in humans occurs as three distinct muscles in cats.

6) Which muscle is a large, flat muscle that lays posterior to the trapezius group?

A) deltoid group

B) levator scapulae ventralis

C) latissimus dorsi

D) supraspinatus

Answer: C

Explanation:

A) The deltoid group is composed of the shoulder muscles lateral to the trapezius group.

B) The levator scapulae ventralis is a flat, strap-like muscle that lies on the side of the neck between the clavotrapezius and the acromiotrapezius.

D) The supraspinatus lays deep to the acromiotrapezius, and occupies the lateral surface of the scapula in the supraspinous fossa.

7) Which group of muscles comprises the shoulder muscles?

- A) trapezius group
- B) deltoid group
- C) rhomboideus group
- D) pectoralis group

Answer: B

Explanation:

- A) The trapezius group of muscles covers the dorsal surface of the neck and the scapula.
- C) The rhomboideus group connects the spinous processes of cervical and thoracic vertebrae with the vertebral border of the scapula. The muscles of this group hold the dorsal part of the scapula to the body.
- D) The pectoralis group consists of the large muscles covering the ventral surface of the chest.

8) Which of the following muscles is NOT found in humans?

- A) levator scapulae ventralis
- B) latissimus dorsi
- C) trapezius
- D) deltoid

Answer: A

Explanation:

- B) Both cats and humans have a large, flat latissimus dorsi.
- C) The single trapezius in humans occurs as three distinct muscles in cats.
- D) The single deltoid in humans occurs as three distinct muscles in cats.

9) Which muscle, that originates on the acromion process of the scapula and inserts on the proximal end of the humerus, functions to flex the forelimb and rotate it laterally?

- A) levator scapulae ventralis
- B) clavodeltoid
- C) acromiotrapezius
- D) latissimus dorsi
- E) acromiodeltoid

Answer: E

Explanation:

- A) The levator scapulae ventralis originates on the occipital bone and atlas, and inserts on the scapula. This muscle, which does not occur in humans, moves the scapula toward the head.
- B) The clavodeltoid, also called the clavobrachialis, originates on the clavicle and inserts on the ulna. It functions to flex the forelimb.
- C) The acromiotrapezius originates on the spinous processes of the cervical and anterior thoracic vertebrae and inserts on the scapular spine. It holds the scapula in place.
- D) The latissimus dorsi originates on the spines of thoracic and lumbar vertebrae, inserts on the medial side of the humerus, and functions to pull the forelimb posteriorly and dorsally.

10) Which muscle is located at the axillary border of the scapula?

- A) splenius
- B) supraspinatus
- C) infraspinatus
- D) rhomboideus major
- E) teres major

Answer: E

Explanation:

- A) The splenius is a broad, flat, and thin muscle that covers most of the lateral surface of the cervical and thoracic vertebrae. It is deep to the rhomboideus capitus.
- B) The supraspinatus occupies the lateral surface of the scapula in the supraspinous fossa.
- C) The infraspinatus occupies the infraspinous fossa on the lateral surface of the scapula.
- D) The rhomboideus major is a fan-shaped muscle and is the most posterior muscle of the rhomboideus group.

11) Which muscle is a broad, flat, and thin muscle that covers most of the lateral surface of the cervical and thoracic vertebrae?

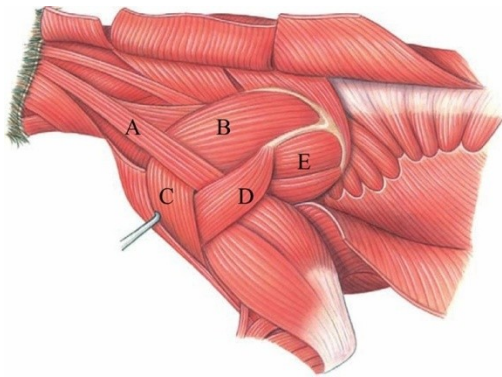
- A) teres major
- B) supraspinatus
- C) infraspinatus
- D) rhomboideus major
- E) splenius

Answer: E

Explanation:

- A) The teres major is located at the axillary border of the scapula.
- B) The supraspinatus occupies the lateral surface of the scapula in the supraspinous fossa.
- C) The infraspinatus occupies the infraspinous fossa on the lateral surface of the scapula.
- D) The rhomboideus major is a fan-shaped muscle and is the most posterior muscle of the rhomboideus group.

12) Which letter is marking the infraspinatus in this figure?



A) A

B) B

C) C

D) D

E) E

Answer: E

Explanation:

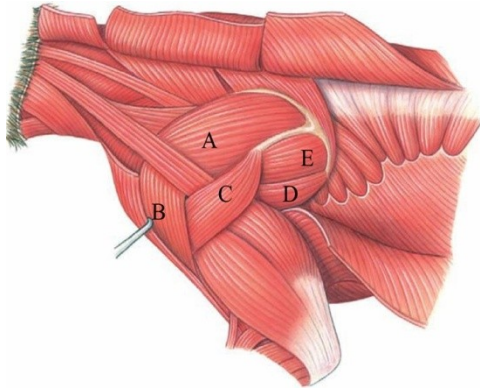
A) Letter "A" is marking the levator scapulae ventralis.

B) Letter "B" is marking the supraspinatus.

C) Letter "C" is marking the acromiodeltoid.

D) Letter "D" is marking the spinodeltoid.

13) Which letter is marking the teres major in this figure?



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

Answer: D

Explanation:

- A) Letter "A" is marking the supraspinatus.
- B) Letter "B" is marking the acromiodeltoid.
- C) Letter "C" is marking the spinodeltoid.
- E) Letter "E" is marking the infraspinatus.

14) Which muscle of the rhomboideus group is NOT found in humans?

- A) rhomboideus major
- B) rhomboideus capitus
- C) rhomboideus minor

Answer: B

Explanation:

- A) Humans have a rhomboideus major and rhomboideus minor. The rhomboideus capitus muscle does not occur in humans.
- C) Humans have a rhomboideus major and rhomboideus minor. The rhomboideus capitus muscle does not occur in humans.