

Canine Vet Trainer Curriculum



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About the Author



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Dr. Whittenburg grew up with many family pets and always dreamed of being a veterinarian. With 16 years of clinical practice in both small and large animal medicine and surgery, Dr. Whittenburg loves to share her veterinary knowledge through teaching and writing.

To work in the field of veterinary medicine, it is crucial to have a basic understanding of medical terms and to be able to perform basic nursing skills. The purpose of this curriculum is to serve as a guide for future veterinary technicians, or even future veterinarians, to familiarize themselves with basic aspects of the field.

Curriculum Structure

The *Canine Vet Trainer* curriculum is composed of the following lessons. Approximate lesson times are included.

Lesson	Title	Approximate Time
One	Basic Canine Anatomy	60 minutes
Two	Veterinary Technician Skills	60 minutes
Three	Bladder Issues, Palpation, and Catheterization in Dogs	60 minutes
	Total	3 hours

Lesson Structure

Each lesson begins with a Lesson Overview, Lesson Objectives, and a Lesson at a Glance table which lists the lesson activities, materials required, suggested preparation steps, and approximate class time.

Lesson Sections

The actual lesson follows the overview, which will contain some of the sections described below.

FOCUS

Every lesson begins with a FOCUS activity intended to capture participants' attention. This may be in the form of a small or large class discussion, a game, a review of previous lesson information, or a demonstration. During this activity, participants are introduced to the topic of the lesson.

LEARN

The LEARN activity in each lesson varies in its presentation mode. It may be a slide presentation, group activity, or demonstration.

REVIEW

The majority of lessons end with a REVIEW activity intended to briefly review the lesson's key messages or main points.

Lesson One – Basic Canine Anatomy

Lesson Overview

In this lesson, participants will be introduced to the fundamental aspects of the anatomy of the dog, as well as directional terms. The Canine Vet Trainer model will be used to aid participants in visualizing the relevant structures as well as allowing them to feel textures and sizes in real life.

Lesson Objectives

After completing this lesson, participants will be able to:

- Use correct anatomical directional terms
- Identify common dog bones
- Identify common dog joints
- Identify common dog organs by system

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS	• <i>Basic Canine Anatomy</i> slide presentation • Whiteboard or chalkboard	1. Prepare the slide presentation for viewing. 2. Read over notes about the similarities and differences between human and canine anatomy	10 minutes
LEARN	• <i>Basic Canine Anatomy</i> slide presentation • <i>Learn Canine Anatomy</i> worksheet • <i>Learn Canine Anatomy</i> – Answer Key	1. Print/photocopy slide presentation (one per participant) 2. Print/photocopy <i>Learn Canine Anatomy</i> worksheet (one per participant)	35 minutes
REVIEW	• Canine Vet Trainer • <i>Basic Canine Anatomy</i> review slide	1. Display the Canine Vet Trainer where participants can see it	15 minutes

Lesson One – Basic Canine Anatomy

FOCUS: Similar vs. Different?

10 minutes

Purpose:

To engage participants in the lesson and get them to think about how dogs are both the same and different from themselves.

Materials:

- *Basic Canine Anatomy* slide presentation
- Whiteboard or chalkboard

Facilitation Steps:

1. Let the participants know that today's lesson will be covering the anatomy of dogs. Give them a minute or two to think about the similarities and differences in human versus dog anatomy. Tell them to think of bones, joints, and organs.
2. Use slides two and three to aid participants in brainstorming.

Slide 2: How are Dogs and Humans Alike?

- Name 5 bones that both dogs and humans have
- Name 5 organs that both dogs and humans have
- Name 5 joints that both dogs and humans have

Slide 3: How are Dogs Different than Humans?

- Name any bone, organ, or muscle that dogs have but humans do not
 - Name any bone, organ, or muscle that humans have but dogs do not
3. Have participants raise their hands while you make a list on a whiteboard or chalkboard of their ideas.
 4. After all participants have given input, discuss their contributions and add the following if they have not been said.

- Most structures are the same, however dogs have 320 bones in comparison to our 206. (Don't worry, we won't cover them all in this lesson). Dogs do not have clavicles (collar bones), an appendix, or widespread sweat glands (they are only located in the feet).
- Dogs have more vertebrae, a bone in their penis (os penis), and have 42 adult teeth (compared to humans' 32).
- An additional fun fact: Dogs have 78 chromosomes whereas humans only have 46.

Lesson One – Basic Canine Anatomy

LEARN: Basic Canine Anatomy

35 minutes

Purpose:

This section will introduce and teach the basics of canine anatomy. After this section, participants should be able to identify major bones, joints, and organs of the dog as well as use anatomically correct directional terms.

Materials:

- *Basic Canine Anatomy* slide presentation
- *Learn Canine Anatomy* worksheet
- *Learn Canine Anatomy – Answer Key*

Facilitation Steps:

1. Pass out copies of the slide presentation and the worksheet to all participants.
2. Using the slides provided, discuss each slide with the class. Notes have been included on the slides and in this curriculum.
3. Go over the worksheet at the end of class.

Slide 4: Lesson Objectives

Briefly discuss what will be covered in this lesson. Communicate the importance of using correct anatomical terms in a medical setting.

Slides 5-11: Directional Terms

Discuss the importance of using anatomically correct directional terms in veterinary medicine. These terms allow medical professionals to clearly describe areas of the body.

Dorsal and ventral terms can be used to describe the locations of lesions, masses, and injections.

Medial and lateral terms apply to the body as well as the limbs.

Cranial and caudal are used on the body.

Rostral and caudal terms are for the head. Rostral replaces cranial.

Though in relation to body's position, proximal and distal terms are used on both the body and the limbs.

Dorsal, palmar, and plantar terms are reserved for the feet.

Thoracic and Pelvic terms apply to the front and back limbs.

Slides 12-15: Major Bones of the Dog

Discuss each listed bone and use the graphic on the slide to locate each one for the participants. Have participants try to identify each of the bones on themselves.

May add the maxilla, mandible, and orbit to Slide 12.

Alert participants to the different formulas versus humans. Fun Fact: Giraffes also only have 7 cervical vertebrae.

Alert participants to the correct spelling of humerus in this context. Also, "digits" is often synonymous with phalanges.

Slides 16-17: Joints of the Dog

Discuss each listed joint and use the graphic to aid participants in locating the joints. Have participants try to identify each joint on themselves.

Note: Dogs do not have clavicles (cats do).

Point out to the participants that the stifle is the dog's knee (patella is the kneecap).

Slides 18-23: Organs of the Dog

Cover each organ and mention a brief amount about its function. Ask participants if they have each of the listed organs.

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Urinary

Note: This diagram is a female dog. Explain to participants that males have a much longer urethra that exits through the penis, down in front of the hind limbs.

Respiratory

The respiratory system can be thought of as a tree that branches into smaller and smaller parts. The alveoli are tiny air sacs where oxygen and carbon dioxide are exchanged with the blood.

Circulatory

Mention to participants that highly oxygenated blood flows from the heart to the tissues.

Oxygen depleted blood flows in veins back to the heart. Though the venous blood is often depicted as blue in color to signify its oxygen depleted status.

Inform the participants that venous blood is red, not blue.

Endocrine

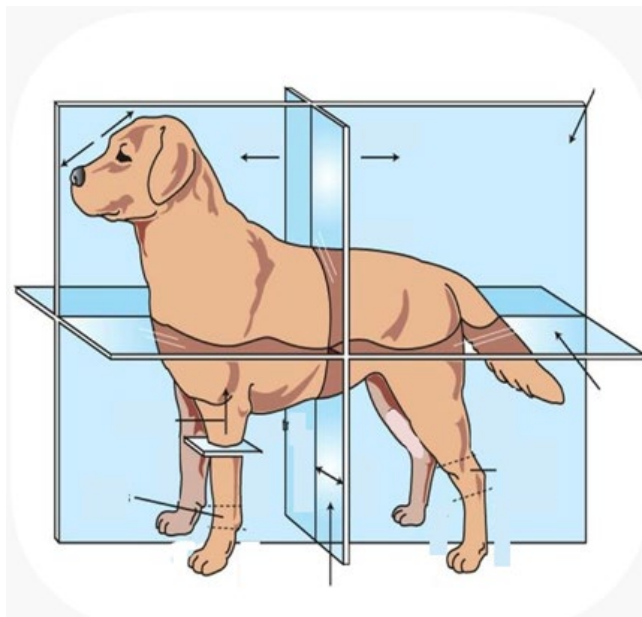
The endocrine system is an extremely complex system that deals with metabolism and bodily functioning.

Name: _____ Class: _____

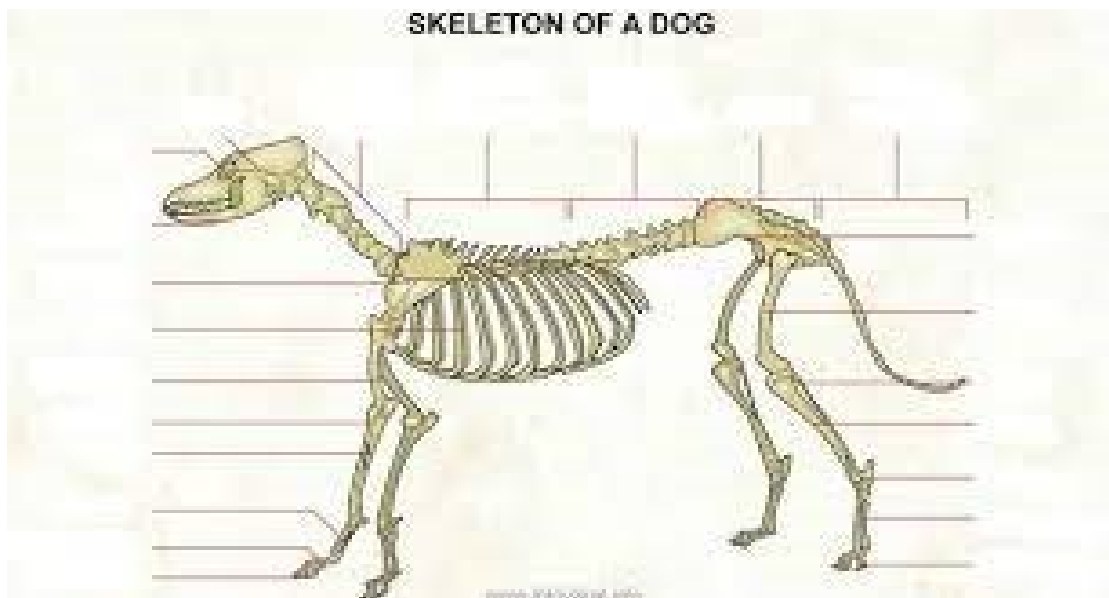
Learn Canine Anatomy

Label the diagrams and keep the worksheet for study notes.

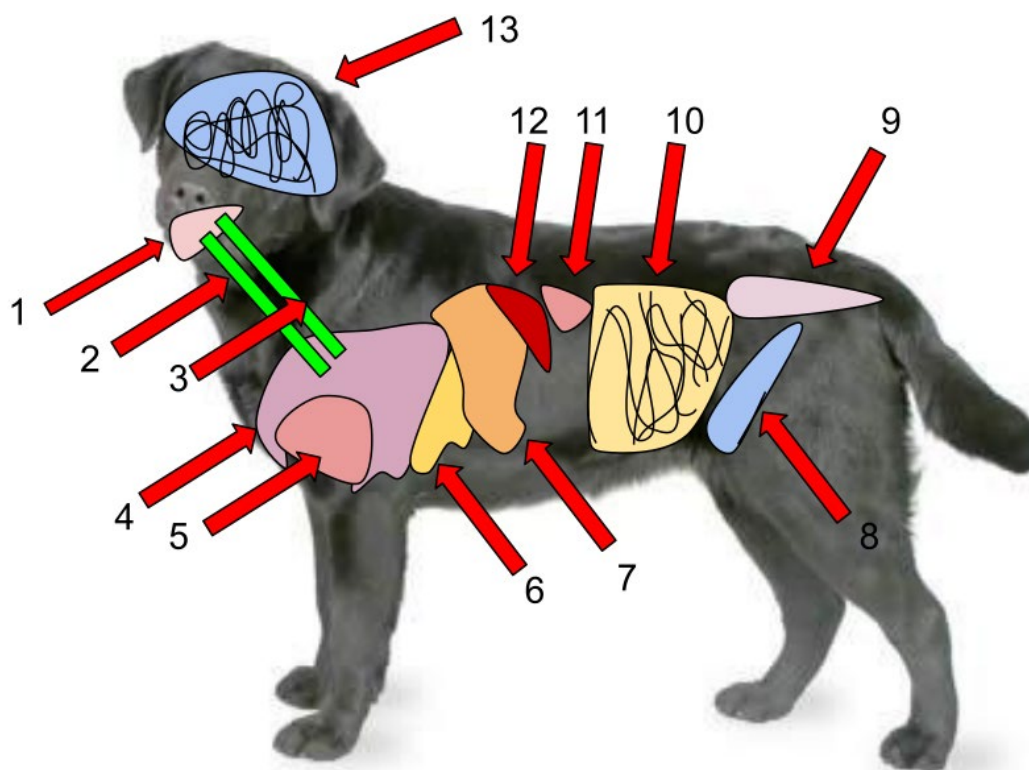
Label the anatomical directional terms as we discussed them in class:



Label the bones and joints we discussed in class:



Label the organs discussed in class:

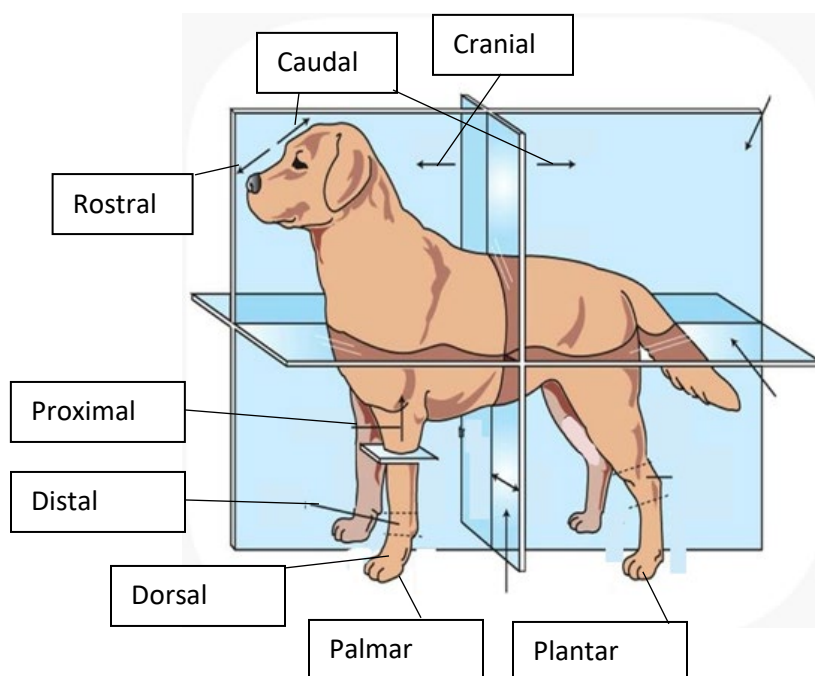


Name: _____ Class: _____

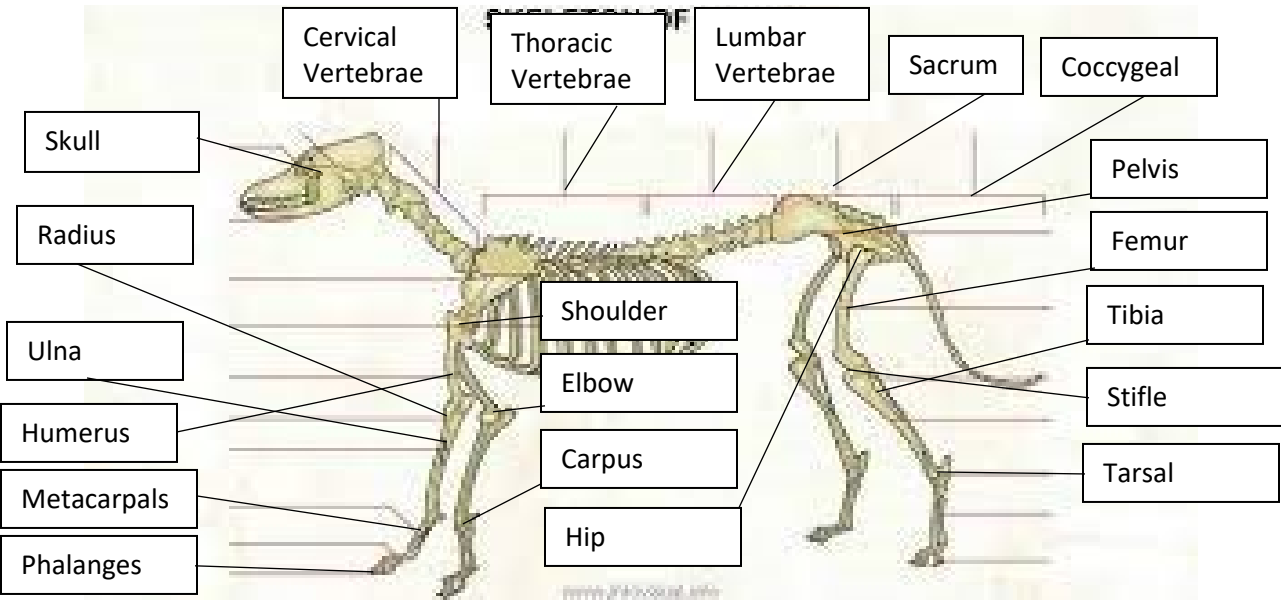
Learn Canine Anatomy – Answer Key

Label the diagrams and keep the worksheet for study notes.

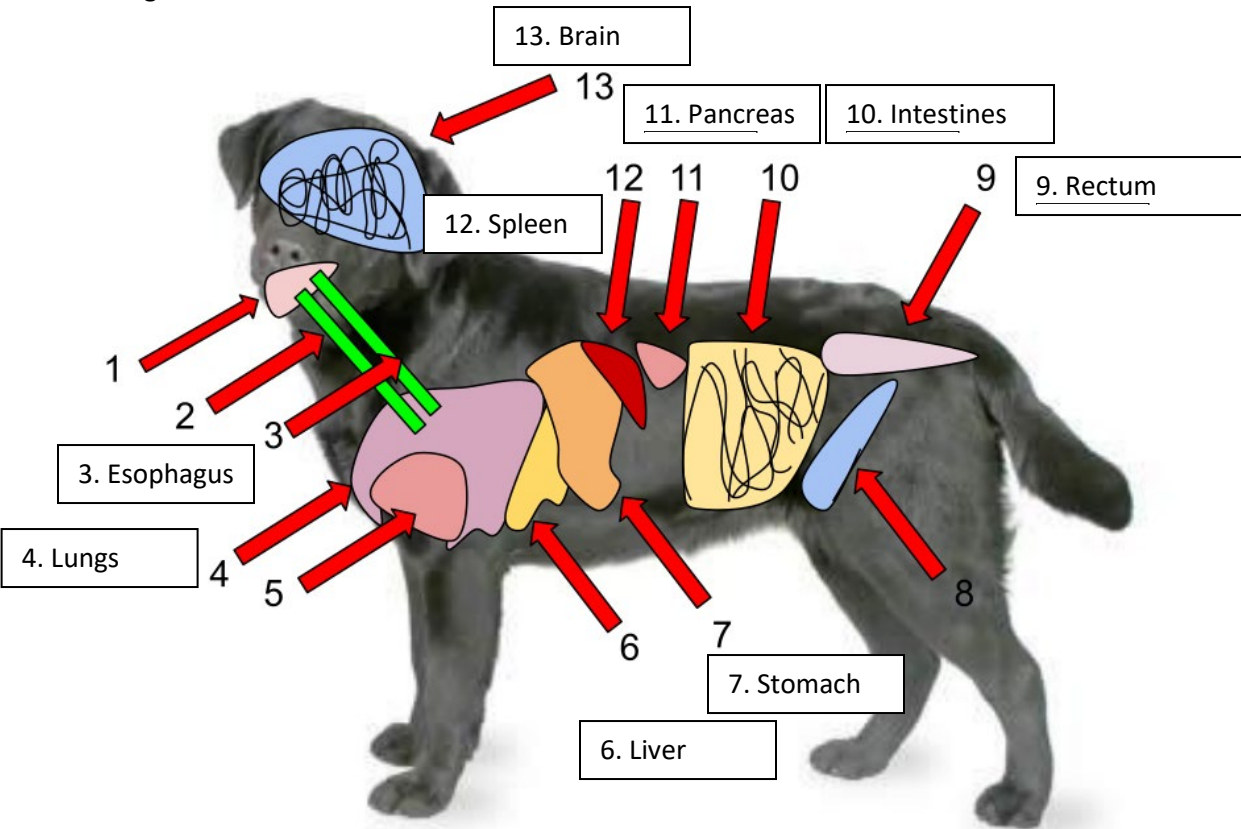
Label the anatomical directional terms as we discussed them in class:



Label the bones and joints we discussed in class:



Label the organs discussed in class:



Lesson One – Basic Canine Anatomy

REVIEW: Put It Into Action

15 minutes

Purpose:

This review activity will allow participants to implement their newly acquired knowledge on a life-like dog model.

Materials:

- Canine Vet Trainer and Slide 24

Facilitation Steps:

1. Using the Canine Vet Trainer, have participants participate in pairs or small groups. Assign a term from the lesson (directional term, bone, joint, or organ) and have the groups take turns locating and demonstrating each term for the other groups.

Slide 24: Review

Alert participants that this slide will be used to help with the review activity while using the Canine Vet Trainer.

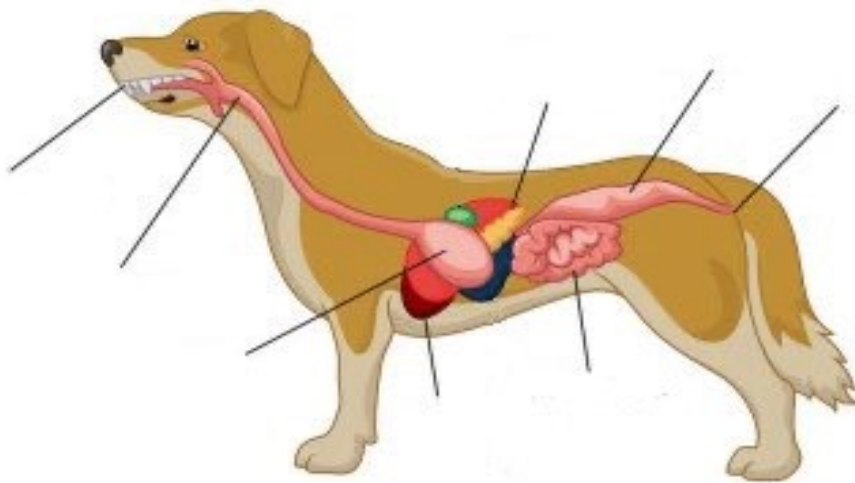
Just For Fun: As an added activity, you can blindfold the participants and let them attempt to locate the terms on the Canine Vet Trainer.

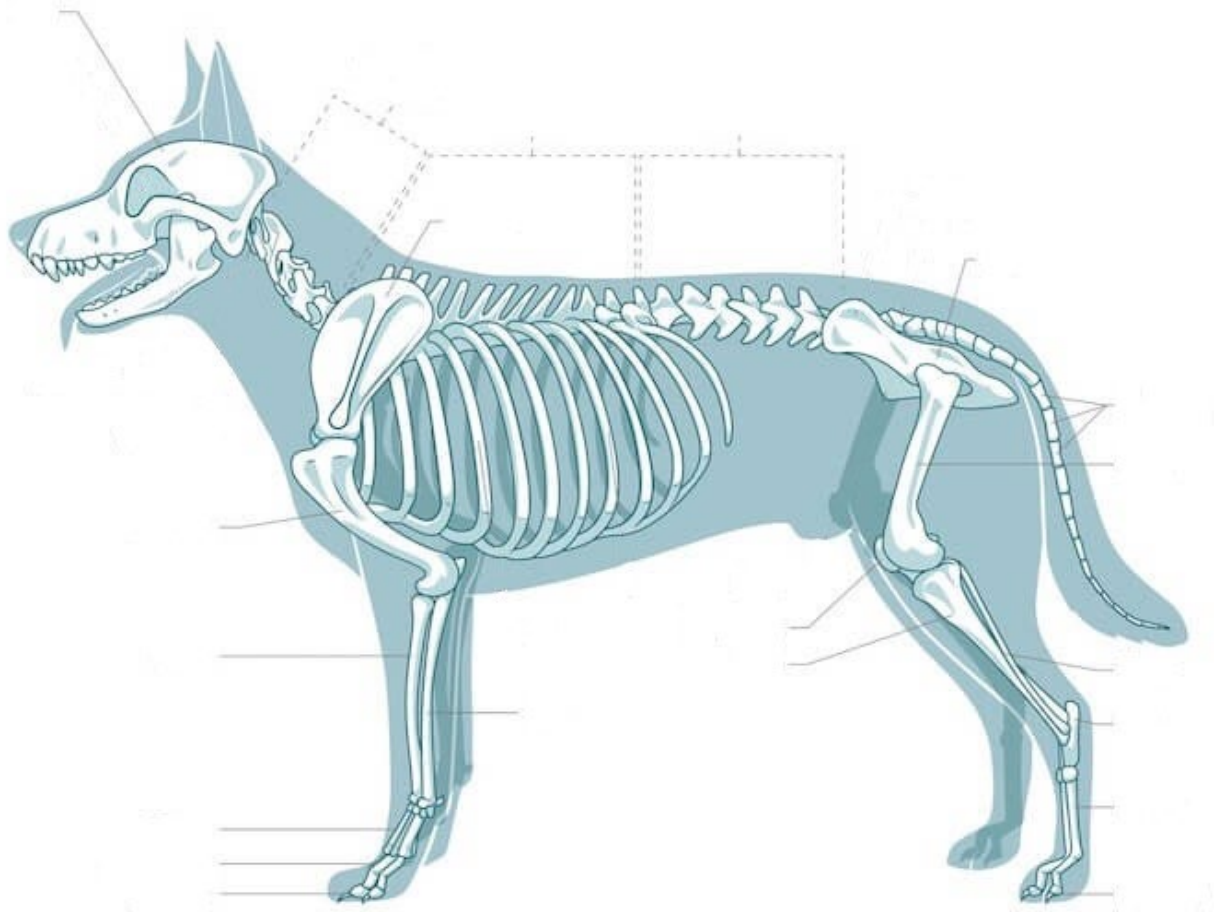
Name: _____ Class: _____

Basic Canine Anatomy Quiz

Part 1:

Directions: Please label the canine structures pointed out in the following diagrams.





Part 2: Answer the following fill in the blank questions.

1. What directional term applies to where the foot is located on the leg?
2. Where is the nose located in relation to the ears?
3. What term applies to the bottom of the front foot (touches the ground)?
4. Where is the dog's umbilicus (belly button) located?
5. What is the outer portion of a leg termed?
6. If a lesion is located along the dog's back, but closer to the head than the tail, what is the directional term used to locate it?
7. What is the correct medical term for a dog's front leg?

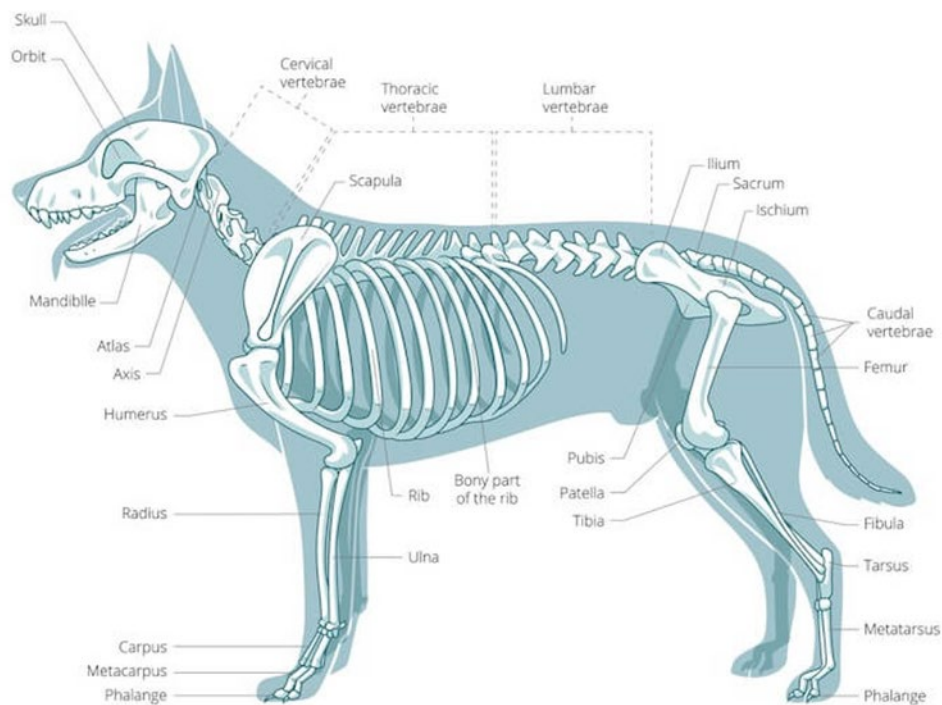
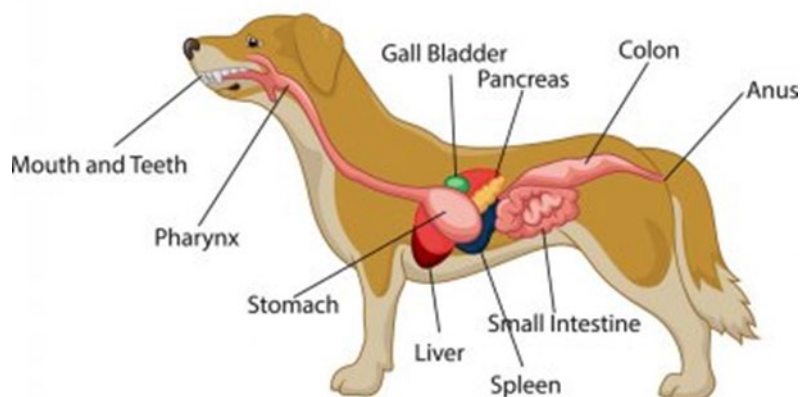
Bonus: Describe the two functions of the pancreas.

Basic Canine Anatomy – Answer Key

Name: _____ Class: _____

Part 1:

Directions: Please label the canine structures pointed out in the following diagrams.



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Part 2: Answer the following fill in the blank questions.

1. What directional term applies to where the foot is located on the leg? **Distal**
2. Where is the nose located in relation to the ears? **Rostral**
3. What term applies to the bottom of the front foot (touches the ground)? **Palmar**
4. Where is the dog's umbilicus (belly button) located? **Ventral abdomen**
5. What is the outer portion of a leg termed? **Lateral side or lateral leg**
6. If a lesion is located along the dog's back, but closer to the head than the tail, what is the directional term used to locate it? **Cranial or craniodorsal**
7. What is the correct medical term for a dog's front leg? **Thoracic limb**

Bonus: Describe the 2 functions of the pancreas. **The pancreas functions to release digestive enzymes into the small intestine and to produce insulin to regulate blood sugar.**

Diagram notes:

Pharynx can also be labeled esophagus.

Anus can also be labeled rectum.

Sources

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Lesson Two – Veterinary Technician Skills

Lesson Overview

Proper restraint is an essential skill for any participant planning to enter veterinary medicine. Being familiar with common injection and venipuncture techniques are also required skills. This lesson will introduce all of these procedures.

Lesson Objectives

After completing this lesson, participants will be able to:

- Understand why proper restraint of animals is essential in a veterinary practice
- Understand how to approach both venipuncture and injections in dogs

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS	• Canine Vet Trainer	1. Display the Canine Vet Trainer where participants can see it. 2. Be familiar with proper restraint techniques for dogs in medical settings	15 minutes
LEARN	• <i>Veterinary Technician Skills</i> worksheet • <i>Veterinary Technician Skills – Answer Key</i> • <i>Veterinary Technician Skills</i> slide presentation	1. Print/photocopy <i>Veterinary Technician Skills</i> slides (one per participant) 2. Print/Photocopy <i>Veterinary Technician Skills</i> worksheet (one per participant) 3. Prepare <i>Veterinary Technician Skills</i> slide presentation for viewing	30 minutes
REVIEW	• Canine Vet Trainer • Syringes with mock or no needles • <i>Veterinary Technician Skills Quiz</i> • <i>Veterinary Technician Skills Quiz – Answer Key</i>	1. Have Canine Vet Trainer available where participants can access/see it. 2. Obtain syringes	15 minutes

Lesson Two – Veterinary Technician Skills: Restraint, Injections, and Venipuncture

FOCUS: Why Restrain?

15 minutes

Purpose:

Participants will be asked to think about why proper restraint is necessary for patients in veterinary medicine. They will also be asked to consider different types of restraint (physical versus chemical).

Materials:

- Whiteboard
- Pen
- Canine Vet Trainer

Facilitation Steps: Follow the steps below to get participants focused on veterinary restraint.

1. Introduce the lesson topic and ask participants to take a few minutes to think about the differences and challenges of treating animals versus humans.
2. Ask participants to raise their hand and give you reasons why restraining animal patients is necessary. Ask leading questions to help participants compare treating an animal that you cannot talk to versus a human.
3. Participants should be asked to think about proper ways to restrain a small animal in the veterinary clinic (dog). Encourage participants to think of physical methods; adjuncts such as muzzles, blankets, and leashes; as well as the option of chemical restraint.

Lesson Two – Veterinary Technician Skills: Restrain, Injections, and Venipuncture

LEARN: Exploration of Veterinary Technician Skills

30 minutes

Purpose:

Introduce participants to basic veterinary technician skills.

Materials:

- *Veterinary Technician Skills* slide presentation
- *Veterinary Technician Skills* worksheet
- *Veterinary Technician Skills* – Answer Key

Facilitation Steps:

1. Project the *Veterinary Technician Skills* slide presentation..
2. Watch the embedded videos for real life demonstrations.
3. As you go through the slides, have each participant follow along with the slides and take notes as they learn veterinary technician skills.
4. Have participants attempt to answer the worksheet questions during the slide presentation.

Slide 1: Title slide

Slides 2-3: Basic Restraint

Emphasize why restraint in the clinic is more difficult (dogs are scared and anxious).

Tell participants that “man-handling” or overly aggressive restraint will make dogs’ behavior worse.

Slide 4: Physical vs Chemical

Emphasize that some patients may need little physical restraint.

Tell participants that if some patients are anxious or aggressive chemical restraint

Slide 5: This is an example of the proper restraint of a canine for an exam for injection.

Note to participants how to the handler has complete control of the dog’s entire body while also allowing for examination or procedures to be done.

Slide 6: Restraint for Cephalic Venipuncture/Injection

Rolling the vein to the lateral side enables it to be stabilized and more easily seen/felt.

Slide 7: Restraint for Lateral Saphenous Access

Note that the holder can comfortably restrain the entire dog and hold off the vein.

Slide 9: Injections in Dogs

Ensure participants understand the concept of SQ – a good example is the scruff on dogs – it goes up like that because of the large subcutaneous space under the skin.

Slides 10-12: Intramuscular Injections

Tell participants to ALWAYS follow the directions of the veterinarian as many medications must be given via specific routes.

Hitting a nerve can cause paralysis and giving certain meds by IV accidentally can be deadly.

Slide 13: Subcutaneous Injections

Instruct participants to be mindful on their fingers that are holding the skin.

Slides 15-22: Venipuncture in Dogs

The jugular should always be used in patients that may require an intravenous catheter to preserve the leg veins.

Collapsed veins won’t bleed.

Careful! The lateral saphenous is “rolly” and moves around a lot, making this procedure difficult.

Assure participants that dogs tolerate the jugular draw well (humans tend to think it would hurt). Also, jugulars are ONLY for blood draws, not injections.

Name: _____ Class: _____

Veterinary Technician Skills Worksheet

Directions: Attempt to answer these questions during the lecture.

1. Why might it be more difficult to restrain a dog in the veterinary clinic versus at home?
2. If a dog is properly restrained for a blood draw, which body parts are NOT restrained?
3. Which hand should be used to hold the syringe to draw blood?
4. Which direction should the cephalic vein be rolled for injection or venipuncture?
5. In what position should a dog be held for a lateral saphenous blood draw?
6. Who holds off the vein for:
 cephalic draws -
 lateral saphenous draws -
 jugular draws -
7. Which of the common injection sites is most painful for dogs?
8. What is important to avoid with an IM injection?
9. As it pertains to IM injections, what is aspirating and why is it done?
10. True or False: The epaxials are an acceptable muscle group for an IM injection.

Name: _____ Class: _____

Veterinary Technician Skills Worksheet – Answer Key

Directions: Attempt to answer these questions during the lecture.

1. Why might it be more difficult to restrain a dog in the veterinary clinic vs. at home?

Dogs are anxious and scared in the clinic.

2. If a dog is properly restrained for a blood draw, which body parts are NOT restrained?

None. The restrainer should be in control of the entire dog.

3. Which hand should be used to hold the syringe to draw blood?

The dominant hand

4. Which direction should the cephalic vein be rolled for injection or venipuncture?

Laterally

5. In what position should a dog be held for a lateral saphenous blood draw?

Lying on its side

6. Who holds off the vein for:

cephalic draws - restrainer/holder

lateral saphenous draws - restrainer/holder

jugular draws - the person drawing blood/injecting

7. Which of the common injection sites is most painful for dogs?

Intramuscular (IM)

8. What is important to avoid with an IM injection?

Blood vessels and nerves

9. As it pertains to IM injections, what is aspirating and why is it done?

Pulling back on the plunger before injecting to check for blood

10. True or False: The epaxials are an acceptable muscle group for an IM injection.

True

Lesson Two – Veterinary Technician Skills: Restrain, Injections, and Venipuncture

REVIEW: Practice It!

15 minutes

Purpose:

This review activity will allow participants to implement their newly acquired knowledge on a life-like dog model.

Materials:

- Canine Vet Trainer
- Syringes with mock (or no) needles
- *Veterinary Technician Skills Quiz*
- *Veterinary Technician Skills Quiz – Answer Key*

Facilitation Steps:

1. Using the Canine Vet Trainer, have participants participate in pairs or small groups. Give participants a few minutes to practice restraining and giving “injections” on the Canine Vet Trainer.
2. In groups, have participants rotate through restraining; giving an IM, SQ, and IV injection; and drawing blood from the jugular, cephalic, and lateral saphenous veins.

Name: _____ Class: _____

Veterinary Technician Skills Quiz

Directions: Answer the following questions as accurately as possible.

1. Should a subcutaneous (SQ) injection go:
 - a. into the skin?
 - b. under the skin?
 - c. into the muscle?
 - d. into a vein?
2. Why are subcutaneous injections less painful in dogs than in humans?
3. If a large volume of blood is required, which vein would be the best choice to draw from?
4. If a dog is extremely anxious or aggressive, how should they be restrained?
5. What will happen if you pull the plunger back too hard while drawing from a cephalic vein?
6. Where should pressure be applied to hold off the jugular vein?
7. What is the proper needle angle for both lateral saphenous and cephalic injections?
8. Should the bevel be facing up or down for a cephalic blood draw?
9. True or False: The longissimus dorsi is the preferred muscle for an IM injection in a dog.
10. What do we call dogs that panic when restrained and actually do better with less restraint?

Name: _____ Class: _____

Veterinary Technician Skills Quiz – Answer Key

Directions: Answer the following questions as accurately as possible.

1. Should a subcutaneous (SQ) injection go:

- a. into the skin?
- b. under the skin?**
- c. into the muscle?
- d. into a vein?

2. Why are subcutaneous injections less painful in dogs than in humans?

Dogs have a large SQ space

3. If a large volume of blood is required, which vein would be the best choice to draw from?

Jugular v.

4. If a dog is extremely anxious or aggressive, how should they be restrained?

With chemical restraint (drugs)

5. What will happen if you pull the plunger back too hard while drawing from a cephalic vein?

The vein will collapse

6. Where should pressure be applied to hold off the jugular vein?

At the thoracic inlet

7. What is the proper needle angle for both lateral saphenous and cephalic injections?

45 degrees

8. Should the bevel be facing up or down for a cephalic blood draw?

Up

9. True or False: The longissimus dorsi is the preferred muscle for an IM injection in a dog.

False

10. What do we call dogs that panic when restrained and actually do better with less restraint?

Minimal restraint dogs

Lesson Three – Bladder Issues, Palpation, and Urinary Catheterization in Dogs

Lesson Overview

In this lesson, participants will learn about common bladder issues in dogs, as well as how to competently palpate the bladder in a canine patient. Urinary catheterization will also be covered.

Lesson Objectives

After completing this lesson, participants will be able to:

- Possess knowledge of common bladder issues and what tests may be needed
- Be able to successfully palpate the bladder of a dog
- Have basic knowledge of the catheterization technique in a male dog

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS	• 3 x 5 cards • Scoreboard or chalkboard/whiteboard to keep score • Timer	1. Make 8 cards for the activity 2. Break the participants into 2 groups	15 minutes
LEARN	• <i>Bladder Issues, Palpation, and Urinary Catheterization</i> slide presentation	1. Print/photocopy <i>Bladder Issues, Palpation, and Urinary Catheterization</i> slides (one per participant)	30 minutes
REVIEW	• Canine Vet Trainer • Urinary catheters • Gloves • Copies of physical exam template	1. Divide the class into groups 2. Pass out copies of physical exam template	15 minutes

Lesson Three – Bladder Issues, Palpation, and Urinary Catheterization in Dogs

FOCUS: Veterinary Charades

15 minutes

Purpose:

This is a great icebreaker activity that will also get participants thinking about veterinary medicine.

Materials:

- Whiteboard/chalkboard
- Prepared eight 3 x 5 cards

Facilitation Steps:

1. Tell participants you are going to play a fun icebreaker game. They will need to act out common canine behaviors while their teammates try to guess what the behavior is.
2. Divide participants into two equal groups. Hand each group the 3 x 5 cards with the following terms written on them (1 term per card):
 - Panting
 - Limping
 - Broken leg
 - Meeting another dog
 - Catching a ball/frisbee
 - Eating
 - Running
 - Licking
3. One person from each team should act out the dog behavior while their teammates try to guess. Allow for two minutes per round.
4. Keep score on the board.
5. More terms may be added if you want the activity to last longer.

Lesson Three – Bladder Issues, Palpation, and Urinary Catheterization in Dogs

LEARN: Bladder Slide Presentation

30 minutes

Purpose:

This is the major learning portion of the lesson. Information will be provided to educate participants on common bladder ailments in dogs, how to palpate a bladder successfully, and how to catheterize a male dog.

Materials:

- Projector
- Copies of the *Bladder* slides for participants
- *Bladder* slides

Facilitation Steps:

1. Give each participant a copy of the *Bladder* slide presentation.
2. Encourage participants to engage in the lesson by following along on their copies, taking notes, and asking questions.

Slide 2: What does the Bladder Do?

Ask participants what the bladder does and allow for time to answer. Then instruct on how the bladder is the triangle – shaped, hollow organ that is located in the caudal abdomen and functions to collect and store urine.

Slide 3: Female Dog Bladder

Go over the structures (kidneys, bladder, urethra) and explain the progression of urine made in the kidneys through urination.

Slide 4: Male Dog Bladder

Repeat the previous slide's discussion. Have participants notice the much longer urethra of the male dog.

Slide 6: Urinary Tract Infections

Point out to participants that males are far less likely to suffer from UTIs due to their long urethra.

Slide 7: Bladder Stones

Tell participants that different breeds are predisposed to different types of stones. Some can be dissolved with diet and others require surgery to identify the stone is crucial.

Slides 8-9: Bladder Stone X-Ray

Ask participants to try to ID the stone.

Stone circled in red. Inform participants that these are obvious stones, and many are not this easy to see.

Slide 10: Bladder Tumors

This is an ultrasound image of a bladder tumor in a dog. The arrow shows the growth in the wall of the bladder.

Slide 11: Prostate Issues

Benign prostatic hyperplasia (BPH) or cancer can develop in male dogs and is common in non-neutered (intact) males.

Castration is the treatment of choice

Prostate Cancer carries a poor prognosis

Slide 12: Enlarged Prostate

This shows how an enlarged prostate affects the dog internally.

Slide 13: Prostate Issues

These dogs may also have straining and difficulty defecating.

Slides 14-15: Incontinence

Explain that there is a sphincter at the opening of the bladder. Estrogen aids this sphincter in closing tight. Just as older women in menopause may suffer, spayed dogs do too. However, it does not happen to all female dogs, it can be treated, and it is not a reason to not spay.

Slides 16-19: Bladder Palpation

Warn participants that aggressive palpation may damage or even rupture the bladder.

Either position is fine and may be dictated by the dog's preference. Small dogs are often standing, and larger dogs are lying down.

Slides 20-21: Male Dog Catheterization

Ask participants why it is vital to maintain sterility with this procedure (introducing bacteria into the bladder may cause a UTI).

Watch the video demonstration.

Lesson Three - Bladder Issues, Palpation, and Urinary Catheterization of the Dog

REVIEW: Vet Technician Roleplay!

15 minutes

Purpose:

This review activity will allow participants to implement their newly acquired knowledge on a life-like dog model.

Materials:

- Canine Vet Trainer
- Urinary catheters (size 8-12 French red rubber feeding tubes or polypropylene catheters)
- Gloves (can be exam gloves that students pretend are sterile gloves)
- Mock physical exam sheet (included)

Facilitation Steps:

1. Using the Canine Vet Trainer, have participants participate in pairs or small groups.
2. Have participants take turns being the owner that is presenting the dog (Canine Vet Trainer) for a urinary issue and the technician(s) doing the initial intake. Have the “technicians” roleplay with the “owner” and take a thorough history. Technicians should then perform a brief physical exam, including palpating the bladder.

3. Participants acting as owners should choose one of the following scenarios (do not tell the “technicians” until the roleplay):

- 6-month-old, male, intact German Shepherd that has been urinating all over the house
- 12-year-old, male, intact Miniature Schnauzer that was previously house trained but is not urinating frequently and is urinating in the house. The owner has seen blood in the urine and straining.
- 7-year-old, male, neutered Dalmatian whose urination habits are the same, but the owner has seen blood in the urine.

4. After taking a history and attempting to palpate the bladder, the “technicians” should be told that the veterinarian has asked for a catheterized urine sample. Participants should take turns sterilely placing the urinary catheter in the Canine Vet Trainer.
5. Have fun with it! This is a great activity to not only allow participants to practice the skills they have acquired in this course, but also to give them a glimpse into the life of a veterinary technician. Have the “owners” be funny characters, give the dogs names, or anything else to add some fun!

Physical Exam Checklist			
Name _____		Owner _____	
Diet _____		Vax _____	
Fecal _____		Heartworm _____	
General Appearance ☐ Normal ☐ Abnormal	Integumentary ☐ Normal ☐ Abnormal	Musculo-Skeletal ☐ Normal ☐ Abnormal	Respiratory ☐ Normal ☐ Abnormal
BT _____ HR _____ RR _____ WT _____	Digestive ☐ Normal ☐ Abnormal	Genito-Urinary ☐ Normal ☐ Abnormal	Eyes ☐ Normal ☐ Abnormal
	Ears ☐ Normal ☐ Abnormal	Neural System ☐ Normal ☐ Abnormal	Lymph Nodes ☐ Normal ☐ Abnormal
	Mucous Membranes ☐ Normal ☐ Abnormal	Dental ☐ Normal ☐ Abnormal	Circulatory ☐ Normal ☐ Abnormal

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Name: _____ Class: _____

Bladder Issues, Palpation, and Catheterization

1. What is the primary function of the bladder?
2. What structure leads from the kidney to the bladder?
3. Which structure leads from the bladder to the outside of the body?
4. What is the treatment for benign prostatic hyperplasia in a dog?
5. If a young, intact (not spayed), female dog is experiencing incontinence while awake, is estrogen-responsive incontinence the most likely cause?
6. Explain your answer to Question 5.
7. Which dog is more likely to have a urinary tract infection?
 - A. Jack, a 12-year-old, male terrier
 - B. Lily, a 4-year-old, female Boxer
8. Explain your answer to Question 7.
9. What is the most common treatment for bladder stones in dogs?
10. Why is it important to maintain sterility when catheterizing a dog?

Name: _____ Class: _____

Bladder Issues, Palpation, and Catheterization – Answer Key

1. What is the primary function of the bladder?

To store collect and store urine until it passes out of the body

2. Which structure leads from the kidney to the bladder?

Ureter

3. Which structure leads from the bladder to the outside of the body?

Urethra

4. What is the treatment for benign prostatic hyperplasia in a dog?

Castration (neutering)

5. If a young, intact (not spayed) female dog is experiencing incontinence while awake, is estrogen-responsive incontinence the most likely cause?

No

6. Explain your answer to Question 5.

Estrogen is still present in a non-spayed female. Also, dogs with estrogen-responsive incontinence leak urine while asleep.

7. Which dog is more likely to have a urinary tract infection?

- a. Jack, a 12-year-old, male terrier
- b. Lily, a 4-year-old, female Boxer

8. Explain your answer to Question 7.

UTIs are much more common in females due to the short length of their urethra (more likely to get bacteria into the bladder).

9. What is the most common treatment for bladder stones in dogs?

Surgery

10. Why is it important to maintain sterility when catheterizing a dog?

Introducing bacteria into the bladder may lead to a urinary tract infection.