

\_\_\_\_\_ is essential for organ structure, nutrient transport and energy utilization.

- a. Calcium
- b. Protein
- c. Sulfur
- d. Phosphorus

d. Phosphorus

The \_\_\_\_\_ is white in color and has large drooping ears that cover most of its face.

- a. Yorkshire
- b. Chester White
- c. American Landrace
- d. Hereford

c. American Landrace

The \_\_\_\_\_ is characterized by a red with white face (not less than 2/3 red, exclusive of face and ears), with at least 2 white feet, long face/snout, and small to medium erect ears.

- a. American Landrace
- b. Hereford
- c. Berkshire
- d. Duroc

b. Hereford

"Max" needs 30 mg. Gentocin IV. Gentocin comes in two different concentrations; 50 mg/ml or 100 mg/ml.

Using 50 mg/ml, How many ml would you draw up?  
AND

Using 100 mg/ml, how many ml would you draw up?

- a. 0.6 ml and 0.3 ml
- b. 6 ml and 3 ml
- c. 0.3 ml and 0.6 ml
- d. 3 ml and 6 ml

a. 0.6 ml and 0.3 ml

0.2 L = \_\_\_\_\_ ml

- a. 2
- b. 20
- c. 200
- d. 2000

c. 200

A 13-year-old M/N domestic short hair (DSH) named Buttons has a bite wound in the right side of the mandible. The owner does not know when the cat got the bite wound because Buttons is an outside cat. He has not been eating or drinking the past few days, is lethargic, and on PE has a  $T=103.5^{\circ}$ , HR= 180 bpm, and RR= 45 breaths/min. Other than the mandibular wound, he is healthy. He is current on vaccinations. The decision is made to sedate Buttons so that the wound can be clipped, cleaned, and debrided. You must calculate the dose of injectable anesthetic for Buttons, who weighs 12.5 lbs. The dosage of Ketamine is 22mg/kg IM. The concentration listed on the vial of ketamine is 100 mg/ml.

The animal's weight in kg is?

- a. 2.4 kg
- b. 5.7 kg
- c. 7.1 kg
- d. 9.9 kg

b. 5.7 kg

150. You are doing maintenance on the anesthesia machine. You happen to notice that the granules in the canister are starting to turn purple. What does this usually indicate?

- a. The granules are more than 90 days old.
- b. The granules have lost the ability to absorb anesthetic gases.
- c. The granules should be turned over in the canister - they will regain
- d. The granules have lost the ability to absorb carbon dioxide.

d. The granules have lost the ability to absorb carbon dioxide.

182. The term that means of, or relating to poultry:

- a. Equine
- b. Feline
- c. Porcine
- d. Galline

d. Galline

1000mg = \_\_\_\_\_ g

- a. .001
- b. .01
- c. 1
- d. 10

c. 1

$\frac{1}{4}$  of a L is equivalent to:

- a. 250 ml
- b. 500 ml
- c. 750 ml
- d. 1000 ml

a. 250 ml

The abomasum is:

- a. The first compartment of the ruminant stomach.
- b. The second compartment of the ruminant stomach.
- c. The third compartment of the ruminant stomach.
- d. The fourth compartment of the ruminant stomach.

d. The fourth compartment of the ruminant stomach.

The act of giving birth in horses.

- a. Farrowing
- b. Foaling
- c. Whelping
- d. Laying

b. Foaling

Adam has just assisted in restraining a Lhasa Apso for an IM injection. The RVT that gave the injection must now dispose of the needle and syringe. Where must all needles and syringes be disposed of?

- a. A bottle
- b. A dumpster
- c. A trashcan
- d. A sharps container

d. A sharps container

After autoclaving a surgical pack, you notice that the autoclave tape looks the same as it did when you placed it in the autoclave. What should you do now?

- a. Place the pack with the others - there is no reason to be concerned about the sterility of the instruments.
- b. Open the pack to check the instruments for sterility. If they look clean, they can be used.
- c. Just hide the pack so you do not get in trouble for it not being sterilized.
- d. Place the pack to the side and do not allow it to be used because the sterility of the pack is questionable.

d. Place the pack to the side and do not allow it to be used because the sterility of the pack is questionable.

All of the following are examples of hazards, except \_\_\_\_\_.

- a. Chemical
- b. Mental
- c. Physical
- d. Zoonotic

b. Mental

All of the following are examples of safety equipment, except \_\_\_\_\_.

- a. Back brace
- b. Lead apron
- c. Lead gloves
- d. Lead shoes

d. Lead shoes

All telephone calls should be answered by the \_\_\_\_\_ ring.

- a. first
- b. third
- c. fifth
- d. seventh

b. third

The amount of fecal matter needed for a canine or feline fecal analysis is approximately:

- a. The size of a baseball
- b. The size of a golf ball
- c. The size of a grapefruit
- d. The size of a grape

d. The size of a grape

The amount of food provided to livestock in a 24-hour period is its

- a. graze
- b. ration
- c. roughage
- d. silage

b. ration

Anemia is:

- a. The study of parasites.
- b. A single celled animal.
- c. A decrease in the number of red blood cells.
- d. A disease that can be transmitted from animals to humans.

c. A decrease in the number of red blood cells.

An animal has a superficial wound.  
Superficial means:  
a. Near the surface, also called external.  
b. deep laceration  
c. a wound that is on the extremities of an animal  
d. on an organ.

a. Near the surface, also called external.

An animal health technician is stocking a cabinet with flea control products. He stocks three cases of spray containing 24 cans per case, 13 cases of shampoo with 12 bottles per case, 5 boxes of foam with 10 cans per case, and 6 cases of powder with 8 boxes per case. Three days later he calculates that 35 cans of spray, 18 bottles of shampoo, 5 cans of foam and 21 bottles of powder have been sold. How many total items of flea killing preparations are left in the cabinet?  
a. 245 preparations  
b. 247 preparations  
c. 249 preparations  
d. 251 preparations

b. 247 preparations

An animal is being given a vaccine. Vaccine is defined as  
a. A suspension of killed or modified microorganisms that stimulate an immune response when introduced into the body  
b. Swelling and inflammation  
c. More susceptible to disease  
d. Having no resistance to disease

a. A suspension of killed or modified microorganisms that stimulate an immune response when introduced into the body

An animal is vaccinated for rabies.  
Rabies is caused by:  
a. A rhabdovirus  
b. Parvo virus  
c. Bacteria  
d. Fungus

a. A rhabdovirus

An animal shelter worker is preparing formula for orphaned puppies. There are 9 puppies and each needs 2 ounces of formula. How many ounces of formula must be prepared?  
a. 16 oz  
b. 18 oz  
c. 20 oz  
d. 22 oz

b. 18 oz

An animal that is comfortable with a halter on its head and that responds to the commands of the person who is leading it is said to be \_\_\_\_\_.

- a. halter responsive
- b. show ready
- c. halter broken
- d. domesticated

c. halter broken

Annie is helping to examine a patient. She is instructed to take the temperature, pulse and respiration, which is a crucial part of a physical exam. Which of the following factors does not affect TPR?

- a. age
- b. size
- c. environmental temperature
- d. breed

d. breed

Anthrax is a \_\_\_\_\_ disease of livestock.

- a. Fungal
- b. Parasitic
- c. Bacterial
- d. Zoonotic

c. Bacterial

Aseptic technique is

- a. Precautions taken to prevent contamination of a surgical wound.
- b. Cleaning surfaces with bleach
- c. Swabbing for a bacteria culture
- d. A chemical agent that kills or prevents to growth of microorganisms

a. Precautions taken to prevent contamination of a surgical wound.

The average pulse (beats/min) and respiration (breaths/min) for a horse is

- a. 40-60, 12-20
- b. 60-70, 10-30
- c. 30-60, 8-16
- d. 60-90, 12-20

c. 30-60, 8-16

A bacteria or virus that causes clinical disease

- a. Founder
- b. Strangles
- c. Pathogen
- d. Antigen

c. Pathogen

The bellyband should \_\_\_\_\_ slightly as it is wrapped.

- a. Overlap
- b. Space out
- c. Cut off circulation
- d. Never touch

a. Overlap

Ben may have been exposed to a bacterial zoonotic disease. Which of the following is NOT a zoonotic disease caused by bacteria?

- a. Toxoplasmosis
- b. Leptospirosis
- c. Anthrax
- d. Tuberculosis

a. Toxoplasmosis

Both sheep and goats have \_\_\_\_\_ hooves.

- a. cloven
- b. two toe-nails
- c. split
- d. all of the above

a. cloven

The breed of swine that is characterized by being solid black with a white belt at the shoulder and small erect ears is:

- a. Duroc
- b. Spots
- c. Hereford
- d. Hampshire

d. Hampshire

The capillary refill time (CRT) for Buddy is 1 second. In the patient chart, the CDA records that the CRT for Buddy is:

- a. Abnormally low
- b. Normal
- c. Abnormally high
- d. Not enough information to record

**b. Normal**

Carbohydrates contain or include:

- a. Amino Acids
- b. Simple Sugars
- c. Lipids
- d. None of the above

**b. Simple Sugars**

A cat in end-stage renal disease is receiving epoetin (2000 u/ml). The dose is 100 u/kg. Your patient weighs 5.5 lbs. How many units will you deliver?

- a. 250
- b. 500
- c. 750
- d. 1000

**a. 250**

Cat litter pans and gardening are the most common sources for which protozoan?

- a. Toxoplasma
- b. Giardia
- c. Coccidia
- d. Ancyloplasma

**a. Toxoplasma**

Chipped bones, bowed tendons and other soft tissue injuries can cause what condition in horses?

- a. broken bones
- b. lameness
- c. even gaits
- d. all the above

**b. lameness**



The clinical signs of heartworm are:

- a. vomiting, deep cough, anemia
- b. anemia, deep cough, irregular heart beat
- c. deep cough, irregular heart beat, exercise intolerance
- d. irregular heart beat, anemia, exercise intolerance

c. deep cough, irregular heart beat, exercise intolerance

Cole has been asked to clean the front waiting area of the clinic. With regard to the types of sanitation, which of these best describes "cleaning"?

- a. Physically removing all visible signs of dirt and organic matter such as feces, hair, etc.
- b. Destroying most microorganisms on nonliving things by physical or chemical means.
- c. Destroying all microorganisms and viruses on an object using chemicals and/or heat.
- d. Solutions that destroy microorganisms or inhibit their growth on living tissue.

a. Physically removing all visible signs of dirt and organic matter such as feces, hair, etc.

A compound fracture is one in which:

- a. The break is along the axis of a bone.
- b. The bone shatters in the many pieces.
- c. The break is on one side of the bone.
- d. The bone breaks through the skin.

d. The bone breaks through the skin.

A cow weighed 1,743 pounds prior to calving. The calf weighed 97 pounds and the placenta and amniotic fluid weighed 189 pounds. How much did the cow weigh after calving?

- a. 1557 pounds
- b. 1457 pounds
- c. 1357 pounds
- d. 1257 pounds

b. 1457 pounds

Dana has been asked to dispense a schedule drug as a pain killer for an animal that has had a hip replacement. According to the Controlled Substance Act, she must:

- a. understand the schedules that drugs are placed in and why.
- b. have an authorized person unlock the locked cabinet where the drugs are stored.
- c. ensure that the name and amount of drug used is recorded in the daily log.
- d. All of the above.

d. All of the above.

Determine the number of pounds in 10.5 kilograms.

- a. 25.5
- b. 24.6
- c. 21.9
- d. 23.1

d. 23.1

Diseases that can be transmitted to humans are known as:

- a. Contagious
- b. Benign
- c. Malignant
- d. Zoonotic

d. Zoonotic

A dog that licks his feet, rubs his face, or scratches behind his elbows may be showing signs of:

- a. Allergy
- b. Fatigue
- c. Hunger
- d. Boredom

a. Allergy

Dogs and humans are susceptible to a variety of water-borne parasites. How can dogs become infected?

- a. ingesting aquatic species
- b. swimming
- c. drinking pond water
- d. all the above

a. ingesting aquatic species

During an exam, Julie must take vital signs from an animal. Which of the following steps is the most correct procedure for her to take the rectal temperature?

- a. Shake down thermometer, lubricate with petroleum jelly, gently insert and hold for 1 minute, remove and rotate to read.
- b. Shake down thermometer, lubricate with petroleum jelly, gently insert and hold for 3 minutes, remove and rotate to read.
- c. Wipe thermometer with alcohol, shake down thermometer, lubricate with petroleum jelly, gently insert and hold for 1 minute, remove and rotate to read.
- d. Wipe thermometer with alcohol, shake down thermometer, lubricate with petroleum jelly, gently insert and hold for 3 minutes, remove and rotate to read.

b. Shake down thermometer, lubricate with petroleum jelly, gently insert and hold for 3 minutes, remove and rotate to read.

Dystocia can be defined as:

- a. The carrying of an embryo or fetus.
- b. The process of giving birth.
- c. Abnormal or difficult birth.
- d. A birth in which the offspring enters the birth canal hind end first.

c. Abnormal or difficult birth.

An eight month old Chihuahua was stung by a wasp and had a fluctuation in its heart rate. What term describes its fluctuating heart rate?

- a. Arrhythmia
- b. Auscultation
- c. Bradycardia
- d. Tachypnea

a. Arrhythmia

Erythrocytes are microscopic cells also called

- a. Platelets
- b. White blood cells
- c. Red blood cells
- d. Plasma

c. Red blood cells

Evan is creating a poster over biohazards for his Veterinary Technology class. Which of these is NOT an example of a biohazard and therefore should not be included in his poster?

- a. Needles
- b. Materials soaked with bodily fluids
- c. Bandage material
- d. None of the above

d. None of the above

Examination by tapping the surface to determine density of a body area is called

- a. palpation
- b. auscultation
- c. percussion
- d. tapping

c. percussion

An example of a fungus is

- a. Pink Eye
- b. Ringworm
- c. Sarcoptes
- d. Tuberculosis

b. Ringworm

Feline viral rhinotracheitis symptoms include:

- a. Sneezing, discharge from nose and eyes
- b. Anorexia
- c. Aggression
- d. Licking of wound

a. Sneezing, discharge from nose and eyes

The feline's first line of defense is:

- a. Its teeth
- b. Its claws
- c. Its tail
- d. Its hind legs

b. Its claws

female of the equine species that is four years of age or older.

- a. Colt
- b. Foal
- c. Stud
- d. Mare

d. Mare

A female that has not produced a calf.

- a. Heifer
- b. Steer
- c. Cow
- d. Bull

a. Heifer

A female that has produced a calf.

- a. Heifer
- b. Steer
- c. Cow
- d. Bull

c. Cow

Fenbendazole (10% suspension) is an antiparasitic drug used in the treatment of whipworms, roundworms, hookworms, and some species of tapeworms. For dogs the dosage is 50 mg/kg po for 3 days.

How many mls would you give a dog that weighs 50 lbs?

- a. 9.5 mls
- b. 11.4 mls
- c. 12.1 mls
- d. 14.3 mls

b. 11.4 mls

The five types of white blood cells are:

- a. Eosinophil, basophil, neutrophil, lymphocyte, monocyte
- b. Thrombocyte, monocyte, neutrophil, lymphocyte, eosinophil
- c. Neutrophil, erythrocyte, leukocyte, basophil, eosinophil
- d. Neutrophil, basophil, eosinophil, granulocytes, acanthocyte

a. Eosinophil, basophil, neutrophil, lymphocyte, monocyte

For safety, two people are required to lift anything weighing more than

\_\_\_\_\_ lb.

- a. 10
- b. 20
- c. 30
- d. 40

d. 40

Formalin is most commonly used for

\_\_\_\_\_.

- a. Disinfecting
- b. Flea prevention
- c. Copy machine toner
- d. Tissue biopsy

d. Tissue biopsy

The four things that only a veterinarian may do are:

- a. Prescribe medications
- b. Perform surgery
- c. Provide a diagnosis and a prognosis
- d. All of the above

d. All of the above

Fran is doing research on pathogens. A pathogen is:

- a. A microorganism that produces disease.
- b. Disease that can be transmitted between animals and humans.
- c. Precautions taken to prevent contamination of a surgical wound.
- d. Refers to the back.

a. A microorganism that produces disease.

Frank, a 60lb bulldog, needs to get 60 mg of Prednisone once every other day for 10 days. How many total milligrams of Prednisone does Frank need for 10 days?

- a. 450 mg
- b. 300 mg
- c. 900 mg
- d. 100 mg

b. 300 mg

The function of the cecum is to:

- a. Produce bile.
- b. Aide in the digestion of fibrous materials.
- c. Produce insulin.
- d. None of the above.

b. Aide in the digestion of fibrous materials.

Giving birth in sheep is known as \_\_\_\_\_.

- a. farrowing
- b. ramming
- c. lambing
- d. kidding

c. lambing

Goats have \_\_\_\_\_ chromosomes.

- a. 50
- b. 60
- c. 64
- d. 70

b. 60

A good rule to follow when restraining animals for veterinary care is:

- a. Apply the maximum amount of restraint possible to ensure the safety of all involved.
- b. Apply the minimum effective amount of restraint that will keep the animal and personnel safe.
- c. Always apply the same amount of restraint: that which is usually tolerated by a member of the species being handled.
- d. Never use ropes when restraining animals.

b. Apply the minimum effective amount of restraint that will keep the animal and personnel safe.

Grass tetany is a result of

- a. Nitrogen overload
- b. Nitrogen deficiency
- c. Magnesium deficiency
- d. Phosphorous deficiency

c. Magnesium deficiency

How long is a dog in estrus?

- a. between 4 - 21 days with a mean of 9 days.
- b. exactly 6 days.
- c. between 7 - 28 days with a mean of 11 days.
- d. exactly 15 days

a. between 4 - 21 days with a mean of 9 days.

How long, on average, will a mature horse's hoof grow in a month?

- a. .25 -.38 inches
- b. .15-.25 inches
- c. .38-.5 inches
- d. none of the above

a. .25 -.38 inches

How many mgs of a drug should be given to a patient weighing 22lbs if the dose is 0.2 mg/kg?

- a. 2 mg
- b. 2.2 mg
- c. 22 mg
- d. 22.2 mg

a. 2 mg

I live in a rural farming community where everyone owns some breed of dog. A few houses down from mine lives an Australian Cattle Dog (a.k.a. Blue Heeler) named Rigo. She is quite accustomed to guarding her territory against rodents, skunks, coyotes, and rabbits. Rigo was found with a half-eaten rabbit a few months ago and then gave birth to a litter of eight puppies a few weeks later. When they were old enough for their first set of vaccinations the veterinarian found that all the puppies were infested with hookworms. The veterinarian prescribed medication for all patients, including Rigo, and told my neighbor that they should be rechecked at their next visit.

Rigo's hookworm infection could have been caused by which of the following?

- a. Direct - ingested larvae from the environment or contracted larvae through the skin
- b. Indirect - the rabbit could have been infected
- c. Rigo does not have a hookworm infestation
- d. Both a and b

d. Both a and b

Ideally, a horse should be bedded on

- a. Newspaper
- b. Straw
- c. Walnut shavings
- d. Wood shavings

d. Wood shavings

Identification tags are usually placed in the \_\_\_\_\_ of cattle.

- a. teeth
- b. nostrils
- c. hooves
- d. ears

d. ears

If an animal has problems in the right side of the heart, what other problem will likely occur?

- a. Ascites
- b. Lung congestion
- c. Nerve Degeneration
- d. Osteoporosis

a. Ascites



If an animal was suffering from anaphylactic shock, it would be

- a. An exaggerated allergic response
- b. Proteins produced by lymph system
- c. Minerals in the blood stream
- d. Slippery white film

a. An exaggerated allergic response

If Sammy had noticed an increased specific gravity, it could indicate all of the following EXCEPT:

- a. chronic renal disease
- b. dehydration
- c. decreased water intake
- d. acute renal disease

a. chronic renal disease

If the rabbit was infected with hookworms what would be the term for this type of host?

- a. Paratenic
- b. Pest
- c. Atypical
- d. Infectious

a. Paratenic

If working in a veterinary clinic, you understand that the guidelines set forth by the Occupational Safety and Health Administration are based on the principle of

- a. The Right to Know
- b. The Basis of Knowledge
- c. The Determination of Knowledge
- d. The Right of the Knowledge of the Law

a. The Right to Know

If you are bitten, scratched or cut when working around animals, you should:

- a. Wash thoroughly with water and a disinfecting soap, then notify you supervisor.
- b. Quickly rinse out the area.
- c. Just wipe the blood off and bandage if needed.
- d. None of the above.

a. Wash thoroughly with water and a disinfecting soap, then notify you supervisor.

If you had a horse that had a 102.4°F, would you be concerned?

- a. No, it is completely normal.
- b. Yes, it is above normal.
- c. No, it is a little below normal.
- d. Yes, it is extremely below normal.

b. Yes, it is above normal.

An immature female of the porcine species.

- a. Hen
- b. Sow
- c. Gilt
- d. Ewe

c. Gilt

An immature male of the equine species.

- a. Colt
- b. Foal
- c. Stallion
- d. Mare

a. Colt

Immunity is defined as:

- a. Having resistance to a disease due to the formation of antibodies.
- b. Slow and painful abscess
- c. Rhabdovirus
- d. Not being able to tolerate disease

a. Having resistance to a disease due to the formation of antibodies.

In horses, when a fixed object is grabbed with the incisor teeth and air is drawn in repetitively through the mouth, is what:

- a. boredom
- b. need of certain trace minerals
- c. cribbing
- d. all the above

c. cribbing

In most species, what are the kidneys shaped like?

- a. Pears
- b. Circles
- c. Clovers
- d. Beans

d. Beans

In preparation for her CVA test, Mary is studying systems of the body. Which of these is NOT included in the circulatory system?

- a. Heart
- b. Lymphatics
- c. Blood Vessels
- d. Blood

b. Lymphatics

In reference to the previous questions, how many tablets will be dispensed for the 10 days (Prednisone will come in 30 mg tablets)?

- a. 10
- b. 20
- c. 90
- d. 110

a. 10

In the last few hours I have noticed that my dog has been drooling excessively, especially since she never really drools. What could cause this?

- a. oral ingestion of insecticides
- b. dental disease
- c. anxiety & nausea
- d. All the above

d. All the above

In vivo vaccination involves injecting the vaccine into the

\_\_\_\_\_.

- a. newborn chick
- b. hen's uterus
- c. pullet
- d. embryo in the egg

d. embryo in the egg

Indicate the minimum amount of tablets/capsules prescribed for the following order:

Rx: Ascriptin tablets

Sig: 1 tab P.O., BID x 14 days then 1 tab BID prn

- a. 28 tablets
- b. 24 tablets
- c. 20 tablets
- d. 16 tablets

**a. 28 tablets**

Indicate the tablets/capsules prescribed for the following order:

Rx: Cephalexin capsules 250 mg

Sig: 2 cap P.O., STAT; then 1 cap P.O., BID x 14 days

- a. 30 capsules
- b. 40 capsules
- c. 50 capsules
- d. 60 capsules

**a. 30 capsules**

Indicate the tablets/capsules prescribed for the following order:

Rx: Metronidazole tablets 250 mg

Sig: 1 tablet, P.O., BID x 10 days

- a. 10 tablets
- b. 20 tablets
- c. 30 tablets
- d. 40 tablets

**b. 20 tablets**

James accidentally spilled bleach. In order to know the correct clean up procedure to take, he must check the MSDS. The acronym MSDS stands for:

- a. Material Safety from Disease Sheet
- b. Material Safety Data Sheet
- c. Mechanical Safety Destruction Sheets
- d. Mechanical Safety Data Sheet

**b. Material Safety Data Sheet**

Jane is taking a dog's pulse. What is the name of the artery where she will do this?

- a. Femoral artery
- b. Brachiocephalic artery
- c. Facial artery
- d. Carotid Artery

**a. Femoral artery**

A kitten is suffering from FCV. Feline calicivirus is caused by:

- a. RNA virus
- b. Fungus
- c. Bacteria
- d. Does not exist

a. RNA virus

Kyra, a 7-year-old, F/S mixed breed dog (107 lbs) is presented to the clinic with signs of increases vocalization and urine leaking. She does not appear to be PU/PD (increased urination/increased drinking) or having accidents due to lack of training. She usually leaks urine after she has lain down (her bed is damp). The U/A (urinalysis) is WNL as the PE. Scout radiographs of the urinary bladder are unremarkable. Based on her history and pattern of urine leaking, the vet determines that she might have estrogen responsiveness incontinence. She is prescribed DES (diethylstilbestrol) at a dosage of 1 mg po sid for 3 days, followed by maintenance therapy of 1 mg po per week. DES comes in 1-mg and 5-mg tablets.

How many tablets does this dog receive for the first three days?

- a. 5
- b. 4
- c. 3
- d. 2

c. 3

Kyra, a 7-year-old, F/S mixed breed dog (107 lbs) is presented to the clinic with signs of increases vocalization and urine leaking. She does not appear to be PU/PD (increased urination/increased drinking) or having accidents due to lack of training. She usually leaks urine after she has lain down (her bed is damp). The U/A (urinalysis) is WNL as the PE. Scout radiographs of the urinary bladder are unremarkable. Based on her history and pattern of urine leaking, the vet determines that she might have estrogen responsiveness incontinence. She is prescribed DES (diethylstilbestrol) at a dosage of 1 mg po sid for 3 days, followed by maintenance therapy of 1 mg po per week. DES comes in 1-mg and 5-mg tablets.

How many mg does this dog receive for 3 weeks of treatment?

- a. 3
- b. 5
- c. 7
- d. 9

b. 5

The lab receives a prescription order from the veterinarian. He wants the patient to take 40 milligrams (mg) of amoxicillin four times a day for 25 days. The lab has 20 mg amoxicillin tablets. How many tablets should the vet tech give to the client for the 25-day period?

- a. 150 tablets
- b. 200 tablets
- c. 250 tablets
- d. 300 tablets

b. 200 tablets

Lauren is bandaging Bruce, a four year old horse. Leg bandages on horses are started on the \_\_\_\_\_ part of the leg and wrapped toward the back.

- a. Vertical
- b. Horizontal
- c. Lateral
- d. Proximal

d. Proximal

Lauren is taking a patient history from Ms. Harper about her horse. Which is the most appropriate question for her to ask?

- a. "Is your horse drinking a lot of water and eating okay?"
- b. "How much water is it drinking and how much is it eating?"
- c. "Is your horse able to exercise daily?"
- d. "Is your horse drinking more water now than compared to a few months ago?"

b. "How much water is it drinking and how much is it eating?"

Leptospirosis is caused by:

- a. Leptospira bacteria
- b. DNA virus
- c. Borrelia burgdorferi bacteria
- d. None of the above

a. Leptospira bacteria

The level of fluid in the liter bags reads at the 700 mark. How much fluid has been given?

- a. 700 L
- b. 700 ml
- c. 300 L
- d. 300 ml

d. 300 ml

Linda is going to perform a laboratory test. Where is it possible that she will be doing this?

- a. Veterinary hospitals
- b. Research facilities
- c. Zoos
- d. All of the above

d. All of the above

Luke, a border collie, has a problem in the left side of the heart. What other problem will likely occur?

- a. Ascites
- b. Lung congestion
- c. Nerve Degeneration
- d. Osteoporosis

b. Lung congestion

Lyme Disease is a disease caused by a spiral-shaped bacterium, *Borrelia burgdorferi*. Which of the following can become infected?

- a. Dogs & cats
- b. Horses & cattle
- c. Birds & wild animals
- d. All the above

d. All the above

Lyme disease is caused by a:

- a. Bacteria
- b. Virus
- c. Parasite
- d. Fungus

a. Bacteria

A machine that spins samples very rapidly to separate elements based on weight is a

- a. counter
- b. centrifuge
- c. refractometer
- d. cannula

b. centrifuge

Mary is also studying the physiology of the body systems. Which of these is a function of the circulatory system?

- a. Respiration for the body
- b. Urination of waste products
- c. Transportation of nutrients, blood cells, gases, etc.
- d. Protection of the body

c. Transportation of nutrients, blood cells, gases, etc.

A mature female of the galline species.

- a. Hen
- b. Sow
- c. Gilt
- d. Ewe

a. Hen

A mature female of the porcine species that has produced young.

- a. Hen
- b. Sow
- c. Gilt
- d. Ewe

b. Sow

A member of OSHA is doing a walkthrough of a veterinary clinic. The Occupational Safety and Health Administration is housed in

- a. The Department of Health
- b. The Department of Finance
- c. The Department of Security
- d. The Department of Labor

d. The Department of Labor

A microbiologist is staining bacterial slides. He uses a bottle of Gram stain that contains 144 milliliters (mL) of solution. If each slide requires 18 mL of the solution, how many slides can he stain with one bottle of solution?

- a. 2 slides
- b. 4 slides
- c. 6 slides
- d. 8 slides

d. 8 slides

A microbiologist notes that the average length of a bacterium is  $\frac{1}{1000}$  micrometer (mcm). Viruses range in size from  $\frac{1}{2500}$  to 1500mcm. How much longer is a bacterium than the smallest virus in mcm?

- a.  $\frac{3}{5000}$  mcm
- b.  $\frac{4}{5000}$  mcm
- c.  $\frac{3}{500}$  mcm
- d.  $\frac{7}{5000}$  mcm

a.  $\frac{3}{5000}$  mcm

Microfilaria are:

- a. The larval stage of the heartworm.
- b. The segment of the tapeworm containing the male and female reproductive organs.
- c. Microscopic single celled organisms.
- d. None of the above.

a. The larval stage of the heartworm.



Most surgical instruments are manufactured from \_\_\_\_\_.

- a. Aluminum
- b. Copper
- c. Lead
- d. Stainless steel

d. Stainless steel

An MSDS must contain \_\_\_\_\_ sections.

- a. 7
- b. 8
- c. 9
- d. 10

b. 8

Nebulized is defined as:

- a. Turned into a liquid.
- b. Turned into a fine mist.
- c. Turned into molecules
- d. Turned into oxygen

b. Turned into a fine mist.

A newborn chicken.

- a. Chick
- b. Pullet
- c. Cockerel
- d. Broiler

a. Chick

A normal capillary refill time (CRT) is:

- a. 5+ seconds
- b. 4-5 seconds
- c. 3-4 seconds
- d. 1-2 seconds

d. 1-2 seconds

The normal pulse (bpm) for a pig is

- a. 60 bpm
- b. 65 bpm
- c. 70 bpm
- d. 75bpm

c. 70 bpm

The Occupational Safety and Health Act of \_\_\_\_\_ established the Occupational Safety and Health Administration in the Department of Labor.

- a. 1969
- b. 1970
- c. 1971
- d. 1972

b. 1970

One disease that is transmitted by the tick is:

- a. Rocky Mountain Spotted Fever
- b. Toxoplasmosis
- c. Salmonella
- d. Ringworm

a. Rocky Mountain Spotted  
Fever

One of the fastest means of getting drugs in to the bloodstream is:

- a. Orally
- b. Intranasally
- c. Topically
- d. Intravenously

d. Intravenously

The only medical term for lying down is

- a. Recumbent
- b. Adduction
- c. Flexion
- d. Abduction

a. Recumbent

The operating room should be cleaned

- \_\_\_\_\_.
- a. Daily
  - b. Weekly
  - c. Bi-weekly
  - d. Monthly

a. Daily

An orchiectomy:

- a. Removal of the ovaries and uterus.
- b. Removal of the testes.
- c. An incision into the thorax.
- d. Removal of a tumor.

b. Removal of the testes.

The order is 0.5 mg of Centrine, and 0.2 mg tablets are on hand. How many tablets will be administered?

- a. 1.0 tablets
- b. 1.5 tablets
- c. 2.0 tablets
- d. 2.5 tablets

d. 2.5 tablets

The order is for 500 mg of amoxicillin, and tablets on hand are 250 mg. How many tablets will be administered?

- a. 1 tablet
- b. 2 tablets
- c. 5 tablets
- d. 6 tablets

b. 2 tablets

OSHA was created in \_\_\_\_\_.

- a. 1950
- b. 1960
- c. 1970
- d. 1980

c. 1970

People who work with animals on a daily basis are \_\_\_\_\_ faced with potentially dangerous situations.

- a. Never
- b. Sometimes
- c. Always
- d. Rarely

c. Always

The percentage of RBCs in blood is called a

- a. hematocrit
- b. PCV
- c. crit
- d. all of the above

d. all of the above

Pericardium is:

- a. The muscular layer of the heart wall.
- b. The fibrous sac that encloses the heart.
- c. A thin layer that lines the surface of the heart.
- d. A thin layer that lines the inside of the heart.

b. The fibrous sac that encloses the heart.

A person who cares for equine feet including trimming and shoeing is called a/an

- a. equestrian
- b. farrier
- c. hobble
- d. quitor

b. farrier

Poultry rely on a \_\_\_\_\_, a strong muscular organ that may contain grit, to grind their food.

- a. gaggle
- b. gizzard
- c. gosling
- d. gander

b. gizzard

Proper PPE sometimes includes a dosimeter. This is:

- a. A device that measures the amount of radiation someone is exposed to when performing radiology.
- b. Lead gloves
- c. A device that keeps animals from biting you.
- d. Something that covers your face while working with animals.

a. A device that measures the amount of radiation someone is exposed to when performing radiology.

The puppies' infection could be best described as which type?

- a. Direct
- b. Indirect
- c. Transmammary
- d. Transplacental

c. Transmammary

Rabies is transmitted by:

- a. Bite from a tick
- b. Ingestion of fecal material from infected dog
- c. Contamination of wound by saliva
- d. Inhalation bacteria

c. Contamination of wound by saliva

Rabies is transmitted through:

- a. Blood from the affected animal.
- b. Urine from the affected animal.
- c. Feces from the affected animal.
- d. Saliva from the affected animal.

d. Saliva from the affected animal.

Rascal, a 2 year old dog has a foul odor. What could be the cause?

- a. Any brownish material in his ears. He may have an ear infection.
- b. He has tartar on his teeth or very red gums. His teeth need attention.
- c. His skin is dry and has bumps.
- d. All the above

d. All the above

Referring to the lower or bottom view:

- a. Dorsal
- b. Ventral
- c. Cranial
- d. Anterior

b. Ventral

The roundworm is often described as looking like:

- a. Rice
- b. Spaghetti
- c. Flakes
- d. Leech

b. Spaghetti

Sammy found a decreased specific gravity in the urine. This could indicate all of the following EXCEPT:

- a. increased water intake
- b. shock
- c. chronic renal disease
- d. other diseases

b. shock

Sammy is trying to determine the specific gravity of urine. What tools can be used to accomplish this?

- a. Refractometer
- b. Urinometer
- c. Reagent Strips
- d. All of the above

d. All of the above

Sammy is trying to run a urinalysis. He first has to obtain urine from the dog. How can he obtain urine from an animal?

- a. Free Catch
- b. Cystocentesis
- c. Catheterization
- d. All of the above

d. All of the above

A secretary maintains the accounts and writes the paychecks for a veterinary facility. Eight vet techs earn \$13 per hour. If everyone works 40 hours per week, what is the total amount of money needed for the payroll each week?

- a. \$3160
- b. \$4060
- c. \$4160
- d. \$5060

c. \$4160

A set of signs that occur together is called a/an:

- a. sign
- b. symptom
- c. endemic
- d. syndrome

d. syndrome

A sexually mature female of the ovine species.

- a. Ewe
- b. Gilt
- c. Hen
- d. Filly

a. Ewe

A sexually mature male of the bovine species.

- a. Heifer
- b. Steer
- c. Cow
- d. Bull

d. Bull

sexually mature male of the equine species.

- a. Colt
- b. Foal
- c. Stud
- d. Mare

c. Stud

A sexually mature male of the ovine species.

- a. Rooster
- b. Bull
- c. Barrow
- d. Ram

d. Ram

A sheep has a temperature of 102.5°F. This is:

- a. Too low
- b. Normal
- c. Too high

b. Normal

Sheep have \_\_\_\_\_ chromosomes.

- a. 24
- b. 34
- c. 44
- d. 54

d. 54

Six 12 ounce puppies need deworming medication. If the dose is 1ml/lb, how many total ml do you need in order to deworm all of the puppies?

- a. 4.5 mls
- b. 5.7 mls
- c. 6.9 mls
- d. 7.8 mls

a. 4.5 mls

Six blood pressure readings are 115, 120, 123, 121, 121, and 112 mm Hg. What is the average value?

- a. 104
- b. 113
- c. 119
- d. 124

c. 119



The Snap Canine Heartworm Test tests the blood for:

- a. Adult heartworms
- b. Antigen produced by female heartworms
- c. Microfilaria
- d. Female heartworms only

**b. Antigen produced by female heartworms**

The soft "v" shaped tissue in the center of the bottom of the horses hoof

- a. Sole
- b. White line
- c. Wall
- d. Frog

**d. Frog**

A steer weighed 1,145 pounds before harvest. One half of the carcass with fore quarters weighed 393 pounds and one half of the carcass with rear quarters weighed 341 pounds. How much of the steer could not be consumed?

- a. 408 pounds
- b. 409 pounds
- c. 410 pounds
- d. 411 pounds

**d. 411 pounds**

A stethoscope is a common piece of equipment used for clinical exams. The stethoscope is used to listen to the heart, lungs, and \_\_\_\_\_.

- a. murmurs
- b. gastrointestinal sounds
- c. pre-natal sounds
- d. water on the lungs

**b. gastrointestinal sounds**

The study of disease causes

- a. Pathology
- b. Etiology
- c. Anatomy
- d. Caudal

**b. Etiology**

The study of disease causes is

- a. etiology
- b. toxicology
- c. biology
- d. pathology

a. etiology

Sue is taking the temperature and pulse of Max, a medium sized dog. What should she expect the temperature and pulse rate to be? :

- a. 100°F and 100-145 beats/min.
- b. 102°F and 70-120 beats/min.
- c. 100°F and 70-120 beats/min.
- d. 101°F and 60-90 beats/min.

b. 102°F and 70-120  
beats/min.

Sugar, a small dog, has come into a veterinary clinic with sarcoptic mange. To prevent the spread of this and other zoonotic diseases, you need to:

- a. dispose of waste in a proper manner
- b. isolate infected animals
- c. wash hands often
- d. all of the above

d. all of the above

Symptoms of distemper include:

- a. Lameness
- b. Swollen joints
- c. Aggression
- d. Fever, vomiting, diarrhea, nasal secretions, and seizures

d. Fever, vomiting, diarrhea,  
nasal secretions, and seizures

A technician is using a microscope to examine a specimen. If the eyepiece on the microscope has a power of 15x (x means times; a power of 15x magnifies an object 15 times) and the objective has a power of 100x, what is the total number of times she is magnifying the specimen? Hint: to find total magnification on a microscope, multiply the power of the eyepiece times the power of the objective.

- a. 1500x
- b. 2000x
- c. 2500x
- d. 3000x

a. 1500x

<p>The term that means of, or relating to cats:</p> <ul style="list-style-type: none"><li>a. Feline</li><li>b. Bovine</li><li>c. Canine</li><li>d. Galline</li></ul>	<p>a. Feline</p>
<p>The term that means of, or relating to cattle:</p> <ul style="list-style-type: none"><li>a. Feline</li><li>b. Bovine</li><li>c. Canine</li><li>d. Galline</li></ul>	<p>b. Bovine</p>
<p>The term that means of, or relating to dogs:</p> <ul style="list-style-type: none"><li>a. Feline</li><li>b. Bovine</li><li>c. Canine</li><li>d. Galline</li></ul>	<p>c. Canine</p>
<p>The term that means of, or relating to horses:</p> <ul style="list-style-type: none"><li>a. Equine</li><li>b. Galline</li><li>c. Bovine</li><li>d. Ovine</li></ul>	<p>a. Equine</p>
<p>The term that means of, or relating to sheep:</p> <ul style="list-style-type: none"><li>a. Equine</li><li>b. Galline</li><li>c. Bovine</li><li>d. Ovine</li></ul>	<p>d. Ovine</p>

The term that means of, or relating to swine:

- a. Equine
- b. Canine
- c. Galline
- d. Porcine

d. Porcine

This term refers to a collection of pus (dead white blood cells) that has accumulated in a cavity formed by the tissue due to an infection or other foreign material.

- a. Antigen
- b. Bruise
- c. Abscess
- d. Slab

c. Abscess

To prevent inhaling gas when you are monitoring anesthesia, it is best for you to stand:

- a. Close to the patient's head.
- b. Away from the patient's head.
- c. Anywhere in the room.
- d. Outside of the room.

b. Away from the patient's head.

To remove a tick you should:

- a. Use a match to burn the tick off
- b. Cut the tick off with a knife
- c. Pour alcohol on the tick, then pull it off
- d. Use tweezers to grasp the head and pull straight out

d. Use tweezers to grasp the head and pull straight out

Translate the following into percents:

- 1:100
- a. .05%
  - b. .5%
  - c. 1%
  - d. 1.5%

c. 1%

Use the following scenario to answer the next two questions. An otherwise healthy veterinary technician, Anna, is bitten by a 2-year-old mixed-breed dog, "Tow Tow," while restraining him for a pedicure. The bite does not cause severe tissue damage, but the canine teeth penetrate her skin and she does bleed. Tow Tow is current on all of his vaccinations including rabies. He lives primarily in the backyard of his owner's suburban home. What is the best, first action Anna should take following the bite?

- a. Ignore the bite until she has time to wash it, even though this may not be for a few hours. Once there is time, also inform the veterinarian or office manager.
- b. Wash the wound immediately with soap and water, then with povidone-iodine, and follow with a thorough irrigation with water, then inform the veterinarian or office manager.
- c. Wait until she gets home and clean the wound, without notifying the veterinarian because she fears she will be reprimanded.
- d. Tell a coworker about it, but take no more action regarding the incident.

b. Wash the wound immediately with soap and water, then with povidone-iodine, and follow with a thorough irrigation with water, then inform the veterinarian or office manager.

A vet diagnosed Bill's goat with dyspnea. What does this mean?

- a. The lamb has normal breathing.
- b. The lamb has abnormal heart sounds.
- c. The lamb has difficulty breathing.
- d. The lamb has bluish discoloring of its skin.

c. The lamb has difficulty breathing.

A vet tech gives a dog  $\frac{1}{2}$  ounces (oz) of cough medicine at 6 PM and  $\frac{1}{4}$  oz of cough medicine at 10 PM. What is the total amount of cough medicine received?

- a.  $\frac{1}{4}$  oz
- b.  $\frac{1}{2}$  oz
- c.  $\frac{3}{4}$  oz
- d. 1 oz

c.  $\frac{3}{4}$  OZ

A vet tech is developing X rays. He follows the time chart recommended for the film he is using. What is the total time required to complete the developing process?

Developing Process Time Required

- Developer  $2\frac{1}{4}$  minutes - Rinse  $\frac{3}{4}$  minute
- Fix solution  $3\frac{1}{2}$  minutes - Final wash 19 minutes

- a. 23 minutes
- b.  $23\frac{1}{4}$  minutes
- c.  $23\frac{1}{2}$  minutes
- d.  $23\frac{3}{4}$  minutes

b.  $23\frac{1}{4}$  minutes

A vet tech is in charge of the construction of a new X-ray development unit. She knows that to prevent radiation the walls must be at least  $2\frac{5}{8}$  inches (") thick if gypsum sheet rock is used or  $\frac{1}{16}$ " thick if sheets of lead are embedded in the wall to prevent the passage of radiation. What is the difference of thickness in the two walls?

- a.  $2\frac{1}{2}$  inches
- b.  $2\frac{9}{16}$  inches
- c.  $2\frac{3}{4}$  inches
- d. 3 inches

b.  $2\frac{9}{16}$  inches

A vet tech purchases a new uniform. She spends \$31 for the top, \$28 for the pants, \$56 for shoes, \$7 for socks and \$4 for a name pin. What was her total cost?

- a. \$126
- b. \$136
- c. \$146
- d. \$156

a. \$126

A vet tech uses  $\frac{1}{2}$  oz,  $\frac{3}{4}$  oz, and  $\frac{5}{8}$  oz of solution to perform three urinary analysis tests. How much total solution does she use?

- a. 1 oz
- b.  $1\frac{1}{2}$  oz
- c.  $1\frac{3}{4}$  oz
- d.  $1\frac{7}{8}$  oz

d.  $1\frac{7}{8}$  oz

A veterinarian has diagnosed an animal with typhus, which is a zoonotic disease. Zoonotic means:

- a. Disease that can be transmitted between animals and humans.
- b. Precautions taken to prevent contamination of a surgical wound.
- c. Refers to the back.
- d. A device that measures the amount of radiation someone is exposed to when performing radiology.

a. Disease that can be transmitted between animals and humans.

A veterinarian in a critical care unit determines that one calf was given the following intravenous (IV) solutions in a 24 hour period: 745 milliliters (mL) of 0.9% normal saline, 420 mL of lactated ringers, 1,250 mL of 5% dextrose, and 15 mL of an antibiotic solution. How many total milliliters of IV solution did the patient receive?

- a. 1430 mL
- b. 2430 mL
- c. 3430 mL
- d. 4430 mL

b. 2430 mL

The veterinarian is describing to Spike's owner how he'll be neutered. Neuter is defined as:

- a. Having resistance to a disease
- b. The common term for removal of male reproductive organs
- c. Proteins produced by lymph system
- d. Swelling and inflammation

b. The common term for removal of male reproductive organs

The veterinarian is explaining to Sally's owner how she will be spayed. Spay is defined as:

- a. Substance that induces an immune response
- b. Swelling and inflammation
- c. The common term for removal of female reproductive organs
- d. Allergic response

c. The common term for removal of female reproductive organs

A veterinarian is paid \$53,291 per year. After a raise, her yearly salary increases to \$56,509. What was the amount of her raise?

- a. \$2192
- b. \$3901
- c. \$1450
- d. \$3218

d. \$3218

The veterinarian orders 4.4 mg/kg of carprofen for pain control divided into two equal daily doses for a 50-lb dog. On hand are 100-mg scored tablets. How many tablets is/are administered each morning and afternoon?

- a. 5 tablets in the morning and 2 in the afternoon
- b. 1 tablet in the morning and afternoon
- c. .5 tablets in the morning and 1 in the afternoon
- d. .5 tablets in the morning and afternoon

d. .5 tablets in the morning and afternoon

The veterinarian requests 600 cc of a solution. The instrument used to measure only has marks for mls. You know the correct equivalent of 600 cc in mls because:

- a. cc and mls are equivalent.
- b. A cc is twice the amount of a ml
- c. A ml is twice the amount of a cc
- d. A ml is half the amount of a cc

a. cc and mls are equivalent.

A veterinarian takes blood samples from cows for brucellosis testing. One morning he fills 16 vacutainers (vacuum tubes) with 10 cubic centimeters (cc) of blood, 31 with 9.5 cc of blood, 28 with 7 cc of blood, and 15 with 8.5 cc of blood. How many cc of blood did he obtain from all the cows?

- a. 778 cc
- b. 780 cc
- c. 782 cc
- d. 784 cc

b. 780 cc

A veterinary assistant counts the exam gloves in each room and determines there are 338, 191, 87, 420, 206, and 76 gloves. What is the total number of gloves?

- a. 1118 gloves
- b. 1218 gloves
- c. 1318 gloves
- d. 1418 gloves

c. 1318 gloves

A veterinary assistant must inventory all supplies each month. She counts the following number of thermometers: 4, 12, 7, 23, and 9. What is the total number of thermometers?

- a. 45 thermometers
- b. 50 thermometers
- c. 55 thermometers
- d. 60 thermometers

c. 55 thermometers

A veterinary pharmaceutical company technician uses a 480-milliliter (mL) flask of rabies vaccine solution to fill individual vials. If each vial holds  $\frac{1}{30}$  of the volume of the flask, how many mL of vaccine are in each vial?

- a. 12 mL
- b. 14 mL
- c. 16 mL
- d. 18 mL

c. 16 mL

A veterinary technician inventories the number of medication containers. She finds there are 1,137 safety-lock containers, 963 easy-open containers, 413 15mL bottles, 1,265 30mL bottles, and 258 ointment containers. What is the total number of medication containers?

- a. 3000 containers
- b. 4000 containers
- c. 4036 containers
- d. 1457 containers

c. 4036 containers

A veterinary technician is calculating the bill for hospital care for a kidney transplant cat. The bill for medical services and care was \$2,685. The owners paid \$1,389 when they picked up the cat. A few weeks later they paid another \$497. How much do they still owe?

- a. \$799
- b. \$899
- c. \$999
- d. \$1500

a. \$799



A veterinary technician is counting leukocytes (white blood cells). She counts four areas on the hemocytometer counting chamber, adds the four numbers together and then multiplies by 50 to obtain the correct leukocyte count. If the counts are 23, 27, 28 and 34 what is the correct leukocyte count?

- a. 5600 leukocytes
- b. 5700 leukocytes
- c. 5800 leukocytes
- d. 5900 leukocytes

a. 5600 leukocytes

A veterinary technician notes that a dog's leukocyte (white blood cell) count before surgery was 18,645. Two days after the surgery, the patient had a leukocyte count of 8,968. What is the difference in the leukocyte counts?

- a. 6977
- b. 9677
- c. 1845
- d. 9577

b. 9677

What are the anatomical differences between the oviducts of most mammals and the oviducts of poultry?

- a. Mammals have one oviduct.
- b. Mammals do not have oviducts.
- c. Poultry do not have oviducts.
- d. Poultry have one oviduct.

d. Poultry have one oviduct.

What are the percentages of cells and plasma in blood?

- a. 40% and 60%, respectively
- b. 50% and 50%, respectively
- c. 60% and 40%, respectively
- d. 30% and 70%, respectively

a. 40% and 60%, respectively

What are the primary functions of the hormones that the ovaries produce?

- a. Sexual behavior and maintenance of pregnancy.
- b. To give a deeper voice and more defined muscles.
- c. To maintain weight and pregnancy.
- d. To give secondary male characteristics and maintain weight gain.

a. Sexual behavior and maintenance of pregnancy.

What are the two factors that determine or influence an animal's disposition?

- a. genetic make-up and environmental situation
- b. environmental situation and nutrition
- c. nutrition and housing
- d. housing and genetic make-up

a. genetic make-up and environmental situation

What does "Bang's" disease cause?

- a. Abortions typically in the second half of pregnancy.
- b. A sterile female calf born twin to a male calf.
- c. A decrease in the production of sperm in the male.

a. Abortions typically in the second half of pregnancy.

What does IBR stand for?

- a. Infectious Born Respiration
- b. Indefinitely Bad Respiration
- c. Infectious Bovine Rhinotracheitis
- d. Infectious Bovine Respiration

c. Infectious Bovine Rhinotracheitis

What is a cryptorchid?

- a. Sterile female calf born twin to a male calf.
- b. Condition in which one or both testicles remain in the body cavity.
- c. Process by which sperm are produced by the male.
- d. Causes destruction of the cotyledons of the uterus.

b. Condition in which one or both testicles remain in the body cavity.

What is a freemartin?

- a. Sterile female calf born twin to a male calf.
- b. Process by which ova are produced by the female.
- c. Respiratory viral disease that causes infertility.
- d. Condition in which one or both testicles remain the body cavity.

a. Sterile female calf born twin to a male calf.

What is drenching?

- a. giving a liquid medication orally
- b. milking a dairy goat too often
- c. hosing down a production facility
- d. washing a sheep thoroughly

a. giving a liquid medication orally

What is IBR?

- a. Sterile female calf born twin to a male calf.
- b. Condition in which one or both testicles remain in the body cavity.
- c. Causes destruction of the cotyledons of the uterus.
- d. Viral disease of the respiratory tract that can cause abortion.

d. Viral disease of the respiratory tract that can cause abortion.

What is oogenesis?

- a. Process by which sperm are produced by the male.
- b. Condition in which one or both testicles remain in the body cavity.
- c. Process by which ova are produced by the female.
- d. Causes destruction of the cotyledons of the uterus.

c. Process by which ova are produced by the female.

What is prevention for anal sac swelling?

- a. let your dog scoot
- b. have veterinarian check anal glands
- c. use an enema on a weekly basis
- d. let your dog lick their anal glands

b. have veterinarian check anal glands

What is spermatogenesis?

- a. Process by which sperm are produced by the male.
- b. Condition in which one or both testicles remain in the body cavity.
- c. Process by which ova are produced by the female.
- d. Causes destruction of the cotyledons of the uterus.

a. Process by which sperm are produced by the male.

What is the common percentage of Brahman and British breeds in American cattle?

- a. 3/5, 2/5 cross
- b. 3/7, 4/7 cross
- c. 1/3, 2/3 cross
- d. 3/8, 5/8 cross

d. 3/8, 5/8 cross

What is the main difference between the testes of mammals and the testes of poultry?

- a. Mammals have one testicle.
- b. The testes of poultry do not descend out of the abdominal cavity.
- c. Poultry have one testicle.
- d. The testes of mammals do not descend out of the abdominal cavity.

b. The testes of poultry do not descend out of the abdominal cavity.

What is the name of the set of guidelines to protect employees?

- a. Employee Code of Ethics
- b. Employees Right to Know
- c. Hazard Communication Standard
- d. OSHA

c. Hazard Communication Standard

What is the purpose of the infundibulum?

- a. To transport the egg from the ovary to the oviduct.
- b. To expel the fetus.
- c. To contract during labor.
- d. To give nourishment to the fetus.

a. To transport the egg from the ovary to the oviduct.

What is the vector for heartworms?

- a. Tick
- b. Lice
- c. Flea
- d. Mosquito

d. Mosquito

What parasite transmits Lyme disease?

- a. Dirofilaria immitis
- b. Heartworm
- c. Lice
- d. Tick

d. Tick

What time of the day does the doctor typically do surgeries?

- a. Early Morning
- b. Late Afternoon
- c. Evening
- d. Lunch

a. Early Morning

What type of mite can cause a zoonotic disease?

- a. Demodectic
- b. Otodectes
- c. Sarcoptic
- d. All of the above

c. Sarcoptic

When a patient is having an ovariohysterectomy performed, the patient is placed in \_\_\_\_\_ recumbency.

- a. Lateral
- b. Dorsal
- c. Ventral
- d. Sternal

b. Dorsal

When an animal is presented with an abnormality cranial to a certain body structure, the word cranial means:

- a. Toward the head
- b. Toward the tail
- c. Toward the nose
- d. Closest to the midline

a. Toward the head

When breathing stops

- a. Apnea
- b. Tachypnea
- c. Dyspnea
- d. Detomidine

a. Apnea

When dealing with radioactive equipment, you should always wear:

- a. lead gloves
- b. lead apron
- c. a dosimeter
- d. all of the above

d. all of the above

When evaluating the integumentary system of Rowdy, a Palomino, the CVA would evaluate all the following areas except:

- a. Skin and hide
- b. Mucous membranes
- c. Hooves
- d. Hair

b. Mucous membranes

When in the heart, heartworms congregate in the:

- a. Right ventricle
- b. Right atrium
- c. Left ventricle
- d. Left atrium

a. Right ventricle

When sanitizing, filtration is best described as:

- a. Using a chemical with a mop or sponge.
- b. Soaking items in a chemical disinfectant until they are used.
- c. Incinerating an object or exposing them to a flame.
- d. Removing particles from the air using a physical barrier.

d. Removing particles from the air using a physical barrier.

When treating or assisting a doctor with an animal's abscess wound, it is important to:

- a. Wear disposable gloves.
- b. Disinfect the treatment counter thoroughly.
- c. Wash and disinfect all instruments used.
- d. All of the above.

d. All of the above.

Which breed of swine is characterized by being black in color with four white feet and/or legs, short wrinkled snout, and medium erect ears?

- a. Spots
- b. Berkshire
- c. Hereford
- d. Hampshire

b. Berkshire

Which breeds of dogs are less likely to cause human allergies?

- a. Spaniels
- b. Chows
- c. Schnauzers
- d. Heelers

c. Schnauzers

Which drug schedule has no current accepted medical use?

- a. Schedule I
- b. Schedule II
- c. Schedule III
- d. Schedule IV

a. Schedule I

Which internal parasite is the most common in puppies and kittens?

- a. Roundworm
- b. Hookworm
- c. Whipworm
- d. Giardia

a. Roundworm

Which of the following acronyms is used when administering medication twice a day?

- a. TID
- b. QID
- c. BID
- d. SID

**c. BID**

Which of the following animals is NOT a cecal fermenter?

- a. Horse
- b. Guinea Pig
- c. Pig
- d. Rabbit

**c. Pig**

Which of the following animals would be classified as a Hound Breed?

- a. Chihuahua
- b. Dachshund
- c. Cocker Spaniel
- d. French Bulldog

**b. Dachshund**

Which of the following answers best completes this statement?

Temperature, pulse and respiration rates tend to \_\_\_\_\_ as size of the animal \_\_\_\_\_.

- a. increase, decreases
- b. decreases, decreases
- c. shallow, decreases
- d. decreases slowly, decreases rapidly

**a. increase, decreases**

Which of the following are the "ABC's" of cardiopulmonary resuscitation?

- a. Airway, Breathing, Compression
- b. Always Breath Continuously
- c. Airway, Breathing, Circulation
- d. Airway, Bleeding, Compression

**a. Airway, Breathing, Compression**



Which of the following bedding materials is most commonly used in the small animal clinic?

- a. Pine Shavings
- b. Newspaper
- c. Blankets and Towels
- d. Straw

b. Newspaper

Which of the following breeds of dairy cattle produce the most milk?

- a. Jersey
- b. Guernsey
- c. Holstein
- d. Brown Swiss

c. Holstein

Which of the following breeds of sheep is considered a fine wool breed?

- a. Southdown
- b. Suffolk
- c. Hampshire
- d. Rambouillet

d. Rambouillet

Which of the following cattle breeds would be considered a dairy breed?

- a. Shorthorn
- b. Polled Hereford
- c. Brown Swiss
- d. Gelbvieh

c. Brown Swiss

Which of the following diseases is not a disease that affects dogs?

- a. Rabies
- b. Distemper
- c. Black Leg
- d. Hepatitis

c. Black Leg

Which of the following disinfectants is toxic to cats?

- a. Phenols
- b. Bleach
- c. Quats
- d. None of the above

a. Phenols

Which of the following hazards is associated with radiography?

- a. Hearing Loss
- b. Burns or scalds
- c. Cancer
- d. None of the above.

c. Cancer

Which of the following hormones are the primary hormones produced by the ovaries?

- a. Estrogen and testosterone.
- b. Testosterone and oxytocin.
- c. Testosterone and progesterone.
- d. Estrogen and progesterone.

d. Estrogen and progesterone.

Which of the following hormones is the most primary hormone produced by the testes?

- a. Estrogen
- b. Testosterone
- c. Progesterone
- d. Oxytocin

b. Testosterone

Which of the following is a sign of someone using non-verbal communication to express joy?

- a. Smiling
- b. Hand Shake
- c. Frown
- d. Crossed Arms

a. Smiling

Which of the following is a zoonotic disease?

- a. Ringworm
- b. Cat Scratch Fever
- c. Both A and B
- d. None of the above

c. Both A and B

Which of the following is most important to schedule first when making appointments?

- a. Customer Preference
- b. Annual Appointments
- c. Emergencies
- d. Heartworm Checks

c. Emergencies

Which of the following is not a function of the cervix?

- a. Connects the vagina to the uterus.
- b. Serves as a passageway for semen during copulation.
- c. Serves as a barrier for pathogens and prevents foreign material from entering the uterus.
- d. None of the above.

c. Serves as a barrier for pathogens and prevents foreign material from entering the uterus.

Which of the following is NOT a function of the epididymis?

- a. Site of maturation for sperm.
- b. Site of transportation for sperm.
- c. Site of decomposition for sperm.
- d. Site of storage for sperm.

c. Site of decomposition for sperm.

Which of the following is NOT a function of the uterus?

- a. Provides nourishment for the fetus.
- b. Is the receptacle for the penis during copulation.
- c. Contracts to expel the fetus during parturition.
- d. Incubates the fetus during pregnancy.

b. Is the receptacle for the penis during copulation.

Which of the following is NOT a hazard that you would face while working in a veterinary clinic?

- a. Physical hazards
- b. Chemical hazards
- c. Biological hazards
- d. Psychological hazards

d. Psychological hazards

Which of the following is NOT a method of disposing of dead birds in a poultry production facility?

- a. incineration
- b. burying
- c. recycling
- d. composting

c. recycling

Which of the following is not a primary action of testosterone?

- a. Anabolic growth
- b. Promotes spermatogenesis
- c. Promotes secretions from accessory glands
- d. None of these

d. None of these

Which of the following is NOT a warning sign that your dog or cat may be inclined to bite?

- a. Assuming submissive posture
- b. Crouching with tail between legs
- c. Ears held back, tail wagging quickly
- d. Snarling, with fur on the back raised

c. Ears held back, tail wagging quickly

Which of the following is NOT included on a cage card?

- a. Pet's Name
- b. Pet Owner's Name
- c. Time of day they need to go outside
- d. Procedure

c. Time of day they need to go outside

Which of the following is NOT one of the nutrients that should be included in pet food?

- a. Proteins
- b. Oils
- c. Fats
- d. Water

b. Oils

Which of the following is the first of the five steps of the digestive process?

- a. Mechanical
- b. Chemical
- c. Peristalsis
- d. Absorption

a. Mechanical

Which of the following needles has the smallest bore?

- a. 16 gauge
- b. 20 gauge
- c. 21 gauge
- d. 25 gauge

d. 25 gauge

Which of the following needles would most commonly be used for canine vaccinations?

- a. 16 gauge
- b. 20 gauge
- c. 21 gauge
- d. 25 gauge

c. 21 gauge

Which of the following parasites is considered an endoparasite?

- a. Fleas
- b. Ticks
- c. Hookworms
- d. Mites

c. Hookworms

Which of the following situations would be considered an emergency?

- a. Annual Check-Up
- b. Runny Stool
- c. Flea Prevention
- d. Urinary Blockage

**d. Urinary Blockage**

Which of the following substances is not considered a bio-hazardous substance?

- a. Scalpel blade
- b. Syringe
- c. Microscope Slide
- d. Needle

**b. Syringe**

Which of the following would be considered a brachycephalic breed?

- a. Labrador Retriever
- b. Dachshund
- c. Shih Tzu
- d. Border Collie

**c. Shih Tzu**

Which of these cells would Sammy NOT expect to see in an examination of urine sediment?

- a. Red blood cells
- b. Viral cells
- c. White blood cells
- d. Epithelial cells

**b. Viral cells**

Which of these is a chemical that Sammy would NOT have evaluated in urine?

- a. Ketones
- b. Glucose
- c. Blood
- d. Saline

**d. Saline**

Which of these is NOT a disease-causing agent for zoonotic diseases?

- a. Fungi
- b. Biologics
- c. Viruses
- d. Parasites

b. Biologics

Which of these is NOT part of the process of filtration of the blood through the urinary system?

- a. Nephrons
- b. Medulla
- c. Vena Cava
- d. Kidney

c. Vena Cava

Which of these is the correct flow of blood through the heart?

- a. Right Atrium, Right Ventricle, Pulmonary Arteries, Lungs, Pulmonary Veins, Left Atrium, Left Ventricle, Aorta
- b. Left Atrium, Left Ventricle, Pulmonary Arteries, Lungs, Pulmonary Veins, Right Atrium, Right Ventricle, Aorta
- c. Right Atrium, Right Ventricle, Pulmonary Veins, Lungs, Pulmonary Arteries, Left Atrium, Left Ventricle, Aorta
- d. Left Atrium, Left Ventricle, Pulmonary Veins, Lungs, Pulmonary Arteries, Right Atrium, Right Ventricle, Aorta

a. Right Atrium, Right Ventricle, Pulmonary Arteries, Lungs, Pulmonary Veins, Left Atrium, Left Ventricle, Aorta

Which of these is the scientific name for hookworm?

- a. *Ancylostoma caninum*
- b. *Dipylidium caninum*
- c. *Toxocara canis*
- d. None of the above

a. *Ancylostoma caninum*

Which organization governs the use, storage and disposal of controlled substances?

- a. EPA
- b. DEA
- c. OSHA
- d. None of the above

b. DEA

Which zoonotic disease is fatal in humans?

- a. Corona
- b. Rabies
- c. Parvovirus
- d. Scabies

b. Rabies

While cleaning an exam room, Abby uses a disinfectant. This is:

- a. A chemical agent that kills, or inhibits the growth of microorganisms on inanimate objects.
- b. a washcloth and hot water
- c. something that contaminates surfaces
- d. a chemical agent that allows that growth of microorganisms on inanimate objects

a. A chemical agent that kills, or inhibits the growth of microorganisms on inanimate objects.

While Linda was running a laboratory test, she evaluated total plasma protein, and noticed an elevated total plasma protein. This is a sign of

- a. inflammation
- b. infection
- c. dehydration
- d. all of the above

d. all of the above

Whipworm eggs look like a/an \_\_\_\_\_ under a microscope.

- a. Circle
- b. Oval
- c. Rectangle
- d. Cone

b. Oval

With your veterinarian's permission, what medication can you give your dog if they have an allergic reaction?

- a. Pepto-Bismol
- b. Advil
- c. Benadryl
- d. Frontline

c. Benadryl



You are feeding your dog Woof-Woof Dog Food. It costs \$14.95 for a 35-pound bag, You are feeding a very large dog 3.5 cups of food per day, and each cup weighs 3.5 ounces.

Using the above scenario, how many ounces are there in a bag?

- a. 560 ounces
- b. 122.5 ounces
- c. 480 ounces
- d. 350 ounces

**a. 560 ounces**

You are feeding your dog Woof-Woof Dog Food. It costs \$14.95 for a 35-pound bag, You are feeding a very large dog 3.5 cups of food per day, and each cup weighs 3.5 ounces.

Using the above scenario, what is the cost per pound?

- a. \$2.34 per pound
- b. \$0.23 per pound
- c. \$0.50 per pound
- d. \$4.98 per pound

**c. \$0.50 per pound**

You are feeding your dog Woof-Woof Dog Food. It costs \$14.95 for a 35-pound bag, You are feeding a very large dog 3.5 cups of food per day, and each cup weighs 3.5 ounces.

Using the above scenario, what is the cost per year?

- a. \$97.18 per year
- b. \$4,471.25 per year
- c. \$179.40 per year
- d. \$134.14 per year

**d. \$134.14 per year**

You are restraining a Besenji dog for cephalic venipuncture. When the person performing the injection has placed the needle and is ready to inject the drug, he says to you, "Okay." He is most likely asking you to:

- a. Verbally indicate that he has made contact with the vein
- b. Lift the thumb that is occluding the vein
- c. Release the animal from restraint
- d. Roll the vein in the opposite direction

**b. Lift the thumb that is occluding the vein**

You regularly order six 10-ml vials per month of a drug that has a concentration of 50mg/ml. Now that same drug is only available in 20-ml vials of 10mg/ml. How many vials should you order this month?

- a. 25 vials
- b. 20 vials
- c. 15 vials
- d. 10 vials

**c. 15 vials**

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Your chicken has a heart rate of 275 beats per minute. Is that something to be worried about?

- a. Yes, that is above normal.
- b. Yes, that is below normal.
- c. No, that is normal.
- d. No, that is below normal.

**c. No, that is normal.**

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A zookeeper gives a pot-bellied pig 1200 milligrams (mg) of Streptomycin in a 24-hour period. How many mg does he give the pig per dose if he gives the medication every 6 hours (q6h)?

- a. 100 mg
- b. 200 mg
- c. 300 mg
- d. 400 mg

**c. 300 mg**

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