

**2018 Veterinary Science CDE Key
Written Exam**

1. Which example provides passive immunity? (L&B181)
A.S.06.03.01.a.
 - a. **Colostrum**
 - b. Killed Rabies vaccine
 - c. Modified live vaccine
 - d. Recovering from an illness

2. Where are the “splint bones” in a horse? (R51)
A.S.06.02.03.b.
 - a. Base of tail
 - b. **Lower leg**
 - c. Shoulder
 - d. Lower neck

3. What part of the eye is clear in a young, healthy animal? (R292)
A.S.06.02.03.b.
 - a. Retina
 - b. Iris
 - c. Sclera
 - d. **Lens**

4. Which organ is not involved in breaking down fats? (L&B1120)
A.S.06.02.03.b.
 - a. Pancreas
 - b. Liver
 - c. Gallbladder
 - d. **Large intestine**

5. Which vitamin is responsible for reproductive and muscle health? (W124)
A.S.03.01.02.b.
 - a. A
 - b. D
 - c. **E**
 - d. K

6. What term describes the abnormal noise heard when the linings of the lungs and chest are inflamed? (L&B79)
A.S.06.03.02.a and A.S.07.01.03.b.
 - a. Cyanosis
 - b. Expiration
 - c. **Pleural friction rub**
 - d. Mild Crepitus

7. Needle teeth are found in which newborn? (R110, 414)

A.S.06.02.03.b

- a. Calf
- b. Foal
- c. Piglet**
- d. Chick

8. Which species typically has 2 mammary glands? (R247)

A.S.06.01.03.b and A.S.06.02.03.b

- a. Ovine**
- b. Bovine
- c. Porcine
- d. Canine

9. Which gland produces adrenaline and epinephrine? (R229)

A.S.06.02.03.b

- a. Adrenal gland**
- b. Pituitary gland
- c. Thyroid gland
- d. Meibomian gland

10. What term describes the organized muscle contractions that move food down the esophagus and into the stomach? (L&B104)

A.S.06.01.03.b

- a. Peristalsis**
- b. Blepharospasm
- c. Agglutination
- d. Lysis

11. On an ultrasound, the areas that appear dark relative to surrounding areas are said to be (R343)

A.S.06.01.03.b

- a. Hypoechoic**
- b. Isoechoic
- c. Hyperechoic
- d. Subechoic

12. What term describes a disorder of unknown cause? (R337)

A.S.06.03.02.a

- a. Isotonic
- b. Idiopathic**
- c. Infectious
- d. Iatrogenic

13. The body needs sunlight to produce which vitamin? (W124)

AFNR AS.03.02.02.c

- a. A
- b. D**
- c. E
- d. K

14. Keeping an aquarium clean and not overcrowding the tank will help avoid dangerous levels of (W527)

AFNR AS.07.01.03.b

- a. Ammonia**
- b. Phosphorus
- c. Oxygen
- d. Calcium

15. Which animal is not monogastric? (L&B113)

AFNR AS.06.01.01.b Explain how animals are classified using a taxonomic classification system

- a. Goat**
- b. Horse
- c. Cat
- d. Dog

16. Which of the following does not describe a male equine? (R99)

AFNR AS.04.01.01.b

- a. Stallion
- b. Colt
- c. Filly**
- d. Gelding

17. Bile is stored in which organ? (L&B111)

AFNR AS.07.01.03.b

- a. Liver
- b. Gallbladder**
- c. Pancreas
- d. Small intestine

18. A producer calls you because his cow is in labor and he can see “the bag of waters.” What is he seeing? (repeat 2017, R250)

AFNR AS.04.01.01.b

- a. Amniotic sac**
- b. Umbilical cord
- c. Chorion
- d. Caruncles

19. The vestibular system directly affects which of the following? (L&B117)

AFNR AS.06.03.02.a

- a. Digestion
- b. Reproduction
- c. Balance**
- d. Temperament

20. When a cow is in heat (or “standing heat”) she is in which phase of the estrous cycle? (R249)

AFNR AS.04.01.01.b

- a. Proestrus
- b. Estrus**
- c. Metestrus
- d. Anestrus

21. What is another name for a female equine never bred? (R99)

AFNR AS.04.01.01.b

- a. Brood mare
- b. Agalactic mare
- c. Wet mare
- d. Maiden mare**

22. Which animal is oviparous? (R252)

AFNR AS.04.01.01.b

- a. Hen**
- b. Mare
- c. Queen
- d. Doe

23. Hyperlipidemia describes blood with an abnormally high level of (R317)

AFNR AS.07.01.03.a

- a. Water
- b. Calcium
- c. Glucose
- d. Fats**

24. Bilirubin is found in urine when which organ is not functioning? (R148)

AFNR AS.06.03.01.a

- a. Heart
- b. Stomach
- c. Lungs
- d. Liver**

25. Overfeeding which food item causes obesity in birds and pocket pets? (W295, 480)

AFNR 07.01.03.b

- a. Lettuce
- b. Beets
- c. Rolled oats
- d. **Sunflower seeds**

26. The fetus receives nutrients through the (R249)

AFNR AS.04.01.01.b

- a. **Umbilical cord**
- b. Caudal vena cava
- c. Stomach
- d. Large intestine

27. Chameleons have the ability to change color by using which of the following? (W420)

AFNR AS.06.03.02.a

- a. Trypsin
- b. **Melanin**
- c. Cortisol
- d. Cobalamin

28. Several factors are important when housing rabbits to avoid disease, including the absence of (W262)

- a. Light
- b. **Drafts**
- c. Wire
- d. Nest boxes

29. Which clinical sign is associated with congestive heart failure? (repeat 2017, R174)

AFNR AS.07.01.03.b

- a. Hyperthermia
- b. Stranguria
- c. Halitosis
- d. **Ascites**

30. Dogs at high risk for developing gastric dilation volvulus typically share what characteristic? (repeat 2016, R126)

AFNR AS.07.01.03.b

- a. Short nose
- b. Long body
- c. **Deep chest**
- d. Pendulous abdomen

31. Acetaminophen, or Tylenol, is toxic to animals and damages which organ? (L&B97)

AFNR AS.07.01.03.b

- a. Heart
- b. **Kidney**
- c. Pancreas
- d. Spleen

32. Animals can have nutrient deficiencies that lead to muscle spasms or twitching, otherwise known as (R65)

AFNR AS.07.01.03.b

- a. **Tetany**
- b. Dystrophy
- c. Laxity
- d. Myoplasty

33. Dialysis can be performed when which organ is not functioning? (R151)

AFNR AS.07.01.03.b

- a. Pancreas
- b. Liver
- c. **Kidney**
- d. Gallbladder

34. Which organ absorbs the majority of nutrients from ingested food? (L&B113)

AFNR AS.06.03.01.a

- a. Large intestine
- b. Stomach
- c. Esophagus
- d. **Small intestine**

35. Which disease is not caused by a prion? (L&B227)

AFNR AS.07.02.02.b

- a. Mad cow disease
- b. Creutzfeldt-Jakob disease
- c. **Contagious eczema**
- d. Scrapie

36. Which is a tick-borne disease that causes a “bull’s-eye ” skin lesion, flu-like symptoms, and potentially organ damage? (repeat 2017, W23)

AFNR AS.07.02.02.b

- a. Anaplasmosis
- b. **Lyme disease**
- c. Erlichiosis
- d. Rocky Mountain Spotted Fever

37. Blackleg, overeating disease, and pulpy kidney are all caused by various species of which pathogen? (R404)

AFNR AS.07.02.02.b

- a. *Campylobacter*

- b. Coronavirus
- c. *Chlamydophila*
- d. **Clostridium**

38. Rickettsial diseases are transmitted by which parasite? (R338)
AFNR AS.07.02.02.b

- a. Roundworms
- b. Flies
- c. Mosquitoes
- d. **Ticks**

39. Which is not true about urinary incontinence in dogs? (L&B87)
AFNR AS.06.03.01.a

- a. Females have a higher incidence
- b. Most respond well to estrogen
- c. They often leak urine while sleeping
- d. **Neutering males cause an increased risk**

40. Dirofilaria is another name for infection of which parasite? (R174)
AFNR AS.07.02.02.b

- a. **Heartworm**
- b. Roundworm
- c. Hookworm
- d. Tapeworm

41. Which animal has the fastest heart rate? (L&B65)
AFNR AS.06.03.01.a

- a. Cat
- b. Goat
- c. **Hamster**
- d. Sheep

42. Which is not typically seen with early diabetes mellitus? (L&B164)
AFNR AS.07.01.03.a

- a. Excessive thirst
- b. **Weight gain**
- c. Increased urination
- d. Increased appetite

43. A jaundiced animal's gums will be which color? (R126)
AFNR AS.07.01.03.a

- a. Pink
- b. Purple
- c. Blue
- d. **Yellow**

44. With a spinal cord injury, what deficit causes “knuckling” and the lack of awareness of where one’s limbs are in space? (repeat 2015, L&B154)
AFNR AS.07.01.03.a
- a. Sciatic deficit
 - b. Conscious proprioceptive deficit**
 - c. Menace reflex deficit
 - d. Autonomic receptive deficit
45. Which antibody does the body make in response to invading germs and is the only one that can cross the placenta? (R321)
AFNR AS.04.01.01.b
- a. IgA
 - b. IgE
 - c. IgG**
 - d. IgM
46. Elevated intraocular pressure causes what disorder? (R296)
AFNR AS.07.01.03.a
- a. Glaucoma**
 - b. Entropion
 - c. Blepharitis
 - d. Corneal ulceration
47. Preictal, ictus, and postictal are the 3 stages of what disorder? (R280)
AFNR AS.07.01.03.a
- a. Gastroenteritis
 - b. Tooth decay
 - c. Seizure**
 - d. Arthritis
48. What is another name for the voice box? (R189)
AFNR AS.06.02.03.b
- a. Soft palate
 - b. Epiglottis
 - c. Pleura
 - d. Larynx**
49. What is another name for the percentage of erythrocytes in the blood? (R334)
AFNR AS.06.03.02.a
- a. Hematocrit**
 - b. Leukogram
 - c. Red cell count
 - d. Differential
50. What describes a tumor that is not cancerous? (R323)
AFNR AS.06.02.03.b

- a. Malignant
- b. Benign**
- c. Metastases
- d. Carcinoma



Veterinary Science Career Development Event

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MULTIPLE CHOICE

1. Proper ventilation in a closed animal facility is important for all of the following except:
- a. fresh oxygen
 - b. flushing out microbes
 - c. allows proper lighting
 - d. removes heat

ANS: C

Veterinary Science Preparatory training for the veterinary assistant
Floron C. Faries, Jr., DVM, MS 2011
p. 46

2. Bone types include:
- a. long, short, irregular, and flat
 - b. long, short, irregular, and round
 - c. long, short, regular, and flat
 - d. long, short, regular, and round

ANS: A

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p. 55

3. The scientific name for the dog species is:
- a. *Canis lupus*
 - b. *Canis familiaris*
 - c. *Canis domestica*
 - d. *Canis carnivora*

ANS: B

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p. 83

4. Which of the following is not a major mineral?
- a. Iron
 - b. Calcium
 - c. Potassium
 - d. Chloride

ANS: A

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p.102

5. Which of the following is the most common kind of restraint:
- a. psychological
 - b. physical
 - c. chemical
 - d. hypnosis

ANS: B

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p. 114

6. All of the following are true about rabies except:
- a. it is caused by a virus
 - b. is also known as hydrophobia
 - c. only occurs in mammals
 - d. can be treated with antibiotics

ANS: D

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Floron C. Faries, Jr., DVM, MS 2011
p. 205

7. Dermatitis is the inflammation of the
- a. skin
 - b. muscle
 - c. lungs
 - d. intestines

ANS: A

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p. 229

8. The most essential part of every animal's diet is
- a. fats
 - b. carbohydrates
 - c. vitamins
 - d. water

ANS: D

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Floron C. Faries Jr., DVM, MS 2011
p. 241

9. The prefix _____ means away from
- a. ad-
 - b. ab-
 - c. ex-
 - d. endo-

ANS: B

Veterinary medical terminology
p. 7

10. The term for a lack of development of an organ or tissue or a cell
- a. aplasia
 - b. hypoplasia
 - c. neoplasia
 - d. anaplasia

ANS: A

Medical Terminology
p. 27

11. An example of a mesocephalic dog breed is
- a. pug
 - b. collies
 - c. greyhounds
 - d. labrador

ANS: D

medical terminology
p. 46

12. Which type of fracture has an angular break diagonal to the long axis?
- a. greenstick
 - b. comminuted
 - c. oblique
 - d. transverse

ANS: C

Medical terminology

p. 59

13. When bones abnormally bend out without breaking, it is known as
- a. valgus
 - b. varus
 - c. transverse
 - d. avulsion

ANS: A

veterinary medical terminology

Romich 3rd

p.59

14. During molting, hens will decrease egg production because their bodies are depleted of
- a. fiber
 - b. Vitamin E
 - c. Zinc
 - d. Calcium

ANS: D

veterinary assisting fundamentals and applications

Vanhorn & Clark p. 351

15. Controlled substances are kept in a locked cabinet and are regulated by
- a. IACUC
 - b. DEA
 - c. FDA
 - d. AWA

ANS: B

veterinary assisting fundamentals and applications

Vanhorn and Clark p.599

16. Medical record includes all of the following except:
- a. SOAP
 - b. consent forms
 - c. POVMR
 - d. OSHA

ANS: D

McCurnins 8th chapter 3

17. Most human directed aggression in dogs is
- a. dominance
 - b. from abuse
 - c. fear related
 - d. breed related

ANS: C

McCurnins 8th p.149

18. Abnormal respiratory sounds include all the following except
- a. wheezes
 - b. gurgling
 - c. crackles
 - d. murmurs

ANS:D

McCurnins p.251

19. Protein, fats, and _____ are nutrients that supply energy.

- a. water
- b. carbohydrates
- c. fiber
- d. vitamins

ANS: B

McCurnins 8th p. 293

20. The average gestation length of a female cat is

- a. 45 days
- b. 65 days
- c. 55 days
- d. 75 days

ANS: B

McCurnins 8th p. 380

21. Increased serum glucose may indicate all of the following except:

- a. Addison's disease
- b. excitement
- c. diabetes mellitus
- d. stress

ANS: A

McCurnin's 8th p. 425

22. _____media blank are media that prevent the growth of some types of organisms and are used to facilitate isolation of organisms from mixed cultures.

- a. enrichment
- b. differential
- c. selective
- d. transport

ANS:C

McCurnins 8th p.495

23. Treatment for feline heartworm disease includes:

- a. adulticide
- b. microfilaricide
- c. both a and b
- d. there is no safe and effective treatment

ANS:D

McCurnins 8th p. 688

24. Illnesses in neonate patients that require immediate attention include all of the following except:

- a. hypothermia
- b. dehydration
- c. weight loss
- d. hypoglycemia

ANS: C

McCurnins 8th p. 793

25. All of the following are examples of holistic medicine except:

- a. rehabilitation
- b. chiropractic
- c. acupuncture
- d. vaccines

ANS: D

McCurnins 8th p.846

26. There are some drugs that are safe to deliver through and endotracheal tube in an emergency situation. They are easily remembered through the acronym *NAVEL*. The “A” stands for:

- a. atropine
- b. acetaminophen
- c. acepromazine
- d. atipamezole

ANS: atropine
McCurnins 8th p. 925

27. Anesthesia is induced rapidly in what species?

- a. cats
- b. horses
- c. dogs
- d. pigs

ANS: B
McCurnins 8th p.1119

28. Absorbable suture lose most of their breaking strength within _____ days.

- a. 30
- b. 60
- c. 90
- d. 120

ANS: B
McCurnins 8th p. 1202

29. _____ are believed to be the first domesticated animals.

- a. Cat
- b. Dog
- c. cow
- d. horse

ANS: B
Small animal care and mng p. 5

30. _____ investigate diseased tissue in humans and animals.

- a. Geneticists
- b. Cytologists
- c. zoologists
- d. histopathologists

ANS: D
Small animal care and mng p. 87

31. The _____ regulates the commercial pet food industry and ensures that foods are uniformly labeled and marketed.

- a. AAFCO
- b. OSHA
- c. USDA
- d. IACUC

ANS: A
Small animal care and mng p. 173

32. _____ in dogs cause a cloudy, white opacity of the lens. This disease may be hereditary or nonhereditary and usually cause blindness when fully developed.

- a. glaucoma
- b. retinal atrophy
- c. cataracts
- d. corneal abrasions

ANS: C
Small animal care and mng p. 187

33. _____, also referred to as feline infectious enteritis or cat distemper, is caused by a parvovirus or DNA virus.

- a. Panleukopenia
- b. Rhinotracheitis
- c. Calicivirus
- d. Pneumonitis

ANS: A

Small animal care and mng p. 231

34. The Boston terrier is considered part of what AKC group?

- a. Toy
- b. Terrier
- c. Non-Sporting
- d. Herding

ANS: C

Small animal care and mng p. 164

35. Correct rabbit restraint is important because when frightened they can kick hard enough to fracture it's

- a. foot
- b. tibia
- c. radius
- d. spine

ANS: D

Small animal care and mng p. 267

36. The most important disease is hamster enteritis, also referred to as _____

- a. snuffles
- b. parvo
- c. scours
- d. wet tail

ANS: D

Small animal care and mng p. 285

37. _____ species of rat was the major reservoir for the black plague that killed more than one-fourth of the European population during the 1300's.

- a. *Rattus rattus*
- b. *Rattus auratus*
- c. *Rattus norvegicus*
- d. *Rattus unguiculatus*

ANS: C

Small animal care and mng p. 300

38. _____ are known as the powerhouse of the cell.

- a. lysosomes
- b. endoplasmic reticulum
- c. golgi apparatus
- d. mitochondria

ANS: D

Intro to veterinary science p. 7

39. Tendons connect _____ to _____.

- a. muscle; bone
- b. bone; bone
- c. muscle; muscle
- d. muscle; ligaments

ANS: A

Intro to vet science p.23

40. Tachycardia describes a _____ heart rate.
a. fast
b. normal
c. slow
d. non existent

ANS: A

Intro to vet science p. 63

41. What controls the normal rate of respiration?
a. carbon dioxide
b. lungs
c. oxygen
d. brain

ANS: D

Intro to vet science p. 78

42. What species of animal has lobulated kidneys?
a. cat
b. horse
c. dog
d. cow

ANS: D

Intro to vet science p. 86

43. _____ is hardest substance in the body.
a. dentin
b. bone
c. enamel
d. cementum

ANS: c

intro to vet science p. 103

44. How many cranial nerves are in the central nervous system of a dog?
a. 4
b. 8
c. 12
d. 16

ANS: C

Intro to vet science p. 149

45. Lack of vitamin D prevents normal absorption of calcium and prevents adequate deposition in the bone. If this deficiency occurs in the young it results in a condition known as:
a. rickets
b. Addison's disease
c. brittle bone
d. Cushing's disease

ANS: A

Intro to vet science p. 167

46. Removing the sharp edges of a horse's teeth is called _____
a. filing
b. trimming
c. floating
d, curetting

ANS: C

Intro to vet science p. 208

47. Inanimate objects that can facilitate the transfer of diseases are known as _____ (example: water or feed troughs)

- a. eukaryotes
- b. fomites
- c. prokaryotes
- d. vector

ANS: B

Intro to vet science p. 218

48. What causes ringworm?

- a. fungi
- b. prions
- c. bacteria
- d. worms

ANS: A

Intro to vet science p. 226

49. All of the following are examples of zoonotic diseases except:

- a. cutaneous larva migrans
- b. toxoplasmosis
- c. Mad cow disease
- d. Johne's disease

ANS: D

Intro to vet science p. 266-271

50. _____ is the procedure in which all microorganisms are destroyed.

- a. disinfection
- b. sanitizing
- c. sterilization
- d. cleaning

ANS: C

Intro to vet science p. 293

2021 National FFA Veterinary Science Career Development Event

Written Exam

1. Factors that contribute to stress in animals include all the following except
 - a. Overcrowding
 - b. Weather extremes
 - c. Access to food at all times**
 - d. TransportationIntro to animal sci p. 242

2. The estrous cycle in cattle is described as
 - a. Year round polyestrous**
 - b. Anestrous
 - c. Induced ovulators
 - d. Seasonally polyestrousIntro to Animal Sci p. 126

3. All the following parasites can be passed from one animal to another through fecal material except:
 - a. *Toxocara spp*
 - b. *Ancylostoma spp*
 - c. *Trichuris vulpis*
 - d. *Dirofilaria immitis***Intro to Animal Sci p. 228

4. When a bone is broken cleanly into two pieces it is known as a(an)
 - a. Simple fracture**
 - b. Compound fracture
 - c. Spiral fracture
 - d. Comminuted fractureIntro to Animal Sci p. 44

5. White blood cells are known as
 - a. Thrombocytes
 - b. Leukocytes**
 - c. Erythrocytes
 - d. PlasmaIntro to Animal Sci p. 54

6. Which option is the correct order of blood flow through the heart?
 - a. Right atrium, Right Ventricle, lungs, left atrium, left ventricle**
 - b. Left atrium, left ventricle, lungs, right atrium, right ventricle
 - c. Left atrium, right atrium, lungs, left ventricle, right ventricle
 - d. Right atrium, left atrium, lungs, right ventricle, left ventricle

Intro to Animal Sci p. 65

7. Normal heart rate for a dog is

- a. 58-86
- b. 300-600
- c. 23-70
- d. **100-130**

Intro to Animal Sci p. 65

8. Gas exchange in the lungs occurs in the

- a. **Alveoli**
- b. Bronchi
- c. Trachea
- d. Bronchioles

Intro to Animal Sci p. 77

9. Which species has lobulated kidneys

- a. Horses
- b. **Cows**
- c. Dogs
- d. Cats

Intro to Animal Sci p. 86

10. All the following are examples of zoonotic diseases except:

- a. Rabies
- b. Ringworm
- c. **Foot-and-mouth disease**
- d. Psittacosis

Small Animal Management and Care p. 12-14

11. Which of the following is not a fat-soluble vitamin?

- a. A
- b. D
- c. **C**
- d. K

Small Animal Management and Care p. 124

12. Ruminant animals have how many compartments to their stomachs?

- a. 1
- b. 2
- c. 3
- d. **4**

Small Animal Management and Care p. 132

13. Snuffles is an upper respiratory disease that effects what species?

a. **Rabbits**

b. Hamsters

c. Gerbils

d. Ferrets

Small Animal Management and Care p. 269

14. Which species is nocturnal?

a. Rabbits

b. **Hamsters**

c. Gerbils

d. Ferrets

Small Animal Management and Care p. 279

15. The life expectancy is of a gerbil is

a. 1-3 years

b. **2-4 years**

c. 3-5 years

d. 4-6 years

Small Animal Management and Care p. 293

16. A cavy is more commonly known as a _____.

a. Ferret

b. Hamster

c. **Guinea pig**

d. Gerbil

Small Animal Management and Care p. 319

17. Which species is used for hunting rodents and rabbits?

a. Guinea pig

b. Hamster

c. **Ferret**

d. Gerbil

Small Animal Management and Care p. 346

18. _____ receptors are responsible for the sense of smell.

a. **Olfactory**

b. Pharynx

c. Nasal turbines

d. Sinus

Vet Med term p. 188

19. A _____ is used to measure blood pressure.

a. Otoscope

- b. Stethoscope
- c. **Sphygmomanometer**
- d. Pulse oximeter

Vet Med term p. 332

20. Fever or increase in body temperature can also be referred to all the following except:

- a. Febrile
- b. Pyrexia
- c. **Hypothermia**
- d. Hyperthermia

Vet Med term p. 331

21. Telescoping of one part of the intestines into an adjacent part is called

- a. Volvulus
- b. Diverticulum
- c. Parenchyma
- d. **Intussusception**

Vet Med term p. 131

22. Inflammation of the mouth is

- a. **Stomatitis**
- b. Otititis
- c. Dentitis
- d. Otititis

Vet Med term p. 131

23. The V-shaped pad of the soft horn between the bars on the sole of the equine hoof is known as the

- a. Sole
- b. White line
- c. Ergot
- d. **Frog**

Vet Med term p. 85

24. The correct order of the vertebral segments, from cranial to caudal, is

- a. Coccygeal, sacral, lumbar, thoracic, cervical
- b. Cervical, sacral, lumbar, thoracic, coccygeal
- c. **Cervical, thoracic, lumbar, sacral, coccygeal**
- d. Coccygeal, thoracic, lumbar, sacral, cervical

Vet Med term p. 65

25. Tarsal bones are found in the

- a. Digits
- b. Wrists

c. Stifles

d. **Hocks**

Vet Med term p. 67

26. Larger than normal red blood cells are described as being

a. Hyperchromic

b. Hypochromic

c. Microcytic

d. **Macrocytic**

Vet Med term p. 327

27. The type of roughage feed produced by fermenting chopped plant parts is

a. Concentrate

b. Sweet feed

c. **Silage**

d. Hay

Vet Med term p. 406

28. Veterinary Client Patient Relationship satisfies all the following criteria except:

a. The veterinarian has assumed responsibility of the patient regarding the health and veterinary treatment

b. The veterinarian is available for consultation

c. The veterinarian maintains medical records of the animals' treatments

d. **The veterinarian assumes responsibility of the patient's medical bills**

Veterinary Assisting p. 14

29. Medical records should be completed in

a. **Blue or black ink**

b. Red ink

c. Pencil so it can be easily corrected

d. Any color inks

Veterinary Assisting p. 19

30. If an error is made in a medical record, how should it be corrected?

a. White out or correction fluid

b. Erase it

c. **Place a single line through it**

d. Scribble over it so it can't be read

Veterinary Assisting p. 20

31. In order to use the title veterinary technologist, one must

a. Obtain an associate degree from an AVMA accredited school and pass the VTNE

b. **Obtain a bachelor's degree from an AVMA accredited school and pass the VTNE**

- c. Obtain a job at a veterinary clinic
- d. Complete an online certificate program
Veterinary Assisting p. 49

32. Interpersonal communications include all the following forms of communication except:

- a. Written
- b. Verbal
- c. Body language
- d. **Assumptions**

Veterinary Assisting p. 66

33. Veterinary laws are based on:

- a. **Each states Veterinary Practice Act**
- b. AAHA
- c. OSHA
- d. NAVLE

Veterinary Assisting p. 81

34. When selecting a pet all the following should be considered before deciding except:

- a. Age of pet
- b. Size of pet
- c. Space required for the pet
- d. **How many "likes" will it get on social media**

Veterinary Assisting p. 94

35. A senior dog should be fed which type of diet?

- a. Moderate protein, calcium, and phosphorus
- b. Low fat, low calorie, low protein
- c. Low protein, moderate calcium and phosphorus
- d. **High phosphorus, high calcium, moderate protein**

Veterinary Assisting p. 94

36. Lateral recumbency is a form of

- a. Chemical restraint
- b. Vocal restraint
- c. **Physical restraint**
- d. Not a real form of restraint

Veterinary Assisting p. 98

37. What size clipper blade is used for surgical prep?

- a. **40**
- b. 15
- c. 10
- d. 5

38. The term ovariohysterectomy is commonly defined as

- a. Castration
- b. Spay**
- c. De-claw
- d. Tail docking

Veterinary Assisting p. 116

39. When creating a regular aquarium maintenance schedule how often should the water and pH levels be checked?

- a. Daily
- b. Weekly**
- c. Monthly
- d. Quarterly

Veterinary Assisting p. 223

40. Sheep are primarily raised for all the following except

- a. Meat
- b. Milk
- c. Wool
- d. Companions**

Veterinary Assisting p. 326

41. What equipment is used to separate blood cells from the liquid portion of blood?

- a. Centrifuge**
- b. Sphygmomanometer
- c. refractometer
- d. hemocytometer

Veterinary Assisting p. 415

42. Proglottids found in a dog's feces is a common sign of what intestinal parasite?

- a. *Dipylidium caninum***
- b. *Toxocara canis*
- c. *Toxascaris leonina*
- d. *Trichuris vulpis*

McCurnins p. 446

43. Which form of yeast is most commonly found in patients with ear infections?

- a. *Malassezia pachydermatis***
- b. *Candida albicans*
- c. *Coccidioides immitis*
- d. *Cryptococcus neoformans*

McCurnins p. 510

44. On the 5-point Body Condition Scale guide a score of 5 is considered

- a. Very thin
- b. Ideal
- c. Overweight
- d. **Obese**

McCurnins p. 321

45. It is recommended wellness visits should be scheduled every _____ months for senior and geriatric dogs and cats.

- a. 3
- b. **6**
- c. 9
- d. 12

McCurnins p.262

46. Which of the following is considered a core vaccine for feline patients?

- a. **Feline panleukopenia**
- b. Feline leukemia virus
- c. Feline immunodeficiency virus
- d. Bordetella bronchiseptica

McCurnins p. 266

47. Proteins are large molecules made up of chains of smaller compounds called

- a. Lipids
- b. Vitamins
- c. **Amino acids**
- d. Minerals

McCurnins p.293

48. _____ is the most energy demanding, stressful stage in a typical female dogs' life.

- a. Growth
- b. Gestation
- c. **Lactation**
- d. Weaning

McCurnins p. 324

49. The most common route for administering vaccines in cats and dogs is

- a. IV
- b. ID
- c. IN
- d. **SQ**

McCurnins p.589

50. Alternative veterinary therapies include all the following except

- a. Physical therapy
 - b. Acupuncture
 - c. **Antibiotics**
 - d. Nutraceuticals
- McCurnins p. 845

National FFA Written Exam KEY 2022

Book: Small Animal Care and Management

1. When bringing a ferret home the owner should
 - a. Start training immediately
 - b. Give the ferret time to adjust to its new environment**
 - c. Talk loudly to the ferret so it learns the owner's voice
 - d. Lock them in a room away from the rest of the householdp. 352

2. Which breed of cat has a complete lack of tail due to breed characteristics/standards?
 - a. Manx**
 - b. Ocicat
 - c. Bombay
 - d. Abyssinianp. 210

3. Which species nearly went extinct in the wild due to poachers trapping them for their pelts?
 - a. Ferrets
 - b. Rabbits
 - c. Chinchillas**
 - d. Guinea Pigsp. 332

4. All species of snakes fall into the family Boidae except:
 - a. Reticulated python
 - b. Anaconda
 - c. Boa constrictor
 - d. Corn snake**p. 396

5. Birds have four types of feathers. The purpose of the down feathers is
 - a. Insulation**
 - b. Assist with flight
 - c. Sensory
 - d. Provide the bird's colorp. 441

6. In fish, where is the caudal fin located?
 - a. On the back
 - b. On the side
 - c. On the belly
 - d. On the tail**p. 488

7. The typical average lifespan of a hedgehog is
- a. 1 year
 - b. 5 years**
 - c. 10 years
 - d. 30 years
- p. 544

8. Rabbits are used for all of the following except:
- a. Pets
 - b. Meat
 - c. Research
 - d. Hunting rodents**
- p. 242

9. The most abundant species of the hamsters are
- a. Golden hamsters**
 - b. Dwarf hamsters
 - c. European hamsters
 - d. Romanian hamsters
- p. 278

10. Which species communicates by standing upright and pounding their rear feet?
- a. Hamsters
 - b. Guinea pigs
 - c. Gerbils**
 - d. Ferrets
- p. 293

Book: Veterinary Assisting Fundamentals and applications

11. Which organization/association was developed for the exchange of information and humane care of laboratory animals used in research?
- a. AMA
 - b. AVMA
 - c. AALAS**
 - d. AWA
- p.255
12. Blood is composed of cells and plasma. Plasma is made up of all of the following proteins except:
- a. Albumin
 - b. Globulin
 - c. Fibrinogen
 - d. Pepsin**

p.415

13. A female with a uterine infection where the uterus fills with purulent material (aka pus) is known as

- a. **Pyometra**
- b. Pyoderma
- c. Hyperplasia
- d. Brucellosis

p.455

14. Encephalitis is commonly called

- a. Blind staggers
- b. **Sleeping sickness**
- c. Cancer
- d. Bang's disease

p.509

15. Listening to the heart and lungs through a stethoscope is known as

- a. **Auscultation**
- b. Palpation
- c. Arrhythmia
- d. Observation

p.624

16. All of the following are included in the anatomy of a dog's toenail except

- a. Nailbed
- b. Quick
- c. Keratin
- d. **Epidermis**

p.679

17. Indicator strips/tape on/in a surgical pack are activated when

- a. Proper temperature has been reached
- b. Proper pressure has been reached
- c. Proper time has been reached
- d. **All of the above**

p. 791

18. A cat with extra toes is known as

- a. **Polydactyl**
- b. Teradactyl
- c. Polyphalanges
- d. Teraphalanges

p.123

Commented [SKW1]: Added purulent material

19. Llamas are bred for all of the following except

- a. Meat
 - b. Fiber
 - c. **Riding**
 - d. Packing
- p.239

20. All of the following are types of restraint used on a horse except

- a. Pinching
 - b. Hobbles
 - c. Twitching
 - d. **Nose tongs**
- p.288

21. The peripheral nervous system consists of the sensory somatic system and

- a. Plexus system
 - b. Accessory system
 - c. Automatic system
 - d. **Autonomic system**
- p. 148

22. Blood returns to the heart through the large vessel called the

- a. **Vena cava**
 - b. Ventricle
 - c. Coronary artery
 - d. Pulmonary vein
- p.59

Commented [SKW2]: Changed from vessels to vessel

23. _____ tissue is also referred to as fat.

- a. Corium
 - b. **Adipose**
 - c. Striated
 - d. Neuron
- p.23

24. Passive immunity is acquired by

- a. Vaccinations
 - b. Exposure to disease
 - c. **Transferred from one animal to another**
 - d. Preventatives
- p.181

25. The pituitary gland releases hormones that affect all of the following except

- a. **Blood pressure**

- b. Kidneys
 - c. Thyroid
 - d. Uterus
- p.163

26. All of the following are part of the six major components of animal diets except

- a. Water
 - b. Carbohydrates
 - c. **Probiotics**
 - d. Vitamins
- p. 190

Commented [SKW3]: Changed from animals to animal

27. Bacteria present in four shapes. Which of the following is rod shaped?

- a. Staphylococci
 - b. Streptococci
 - c. **Bacilli**
 - d. Spirochetes
- p.222

28. Ruminants are said to have four stomachs. All of the following are part of the ruminant's stomach except

- a. Abomasum
 - b. **Cecum**
 - c. Omasum
 - d. Reticulum
- p. 114

29. The crown of a cat's tooth is covered in _____, the hardest substance in the body.

- a. Cementum
 - b. Dentin
 - c. Pulp
 - d. **Enamel**
- p. 103

30. Alveoli, where gas exchange takes place in the lungs, are located at the end of the _____

- a. Trachea
 - b. Bronchus
 - c. **Bronchiole**
 - d. Cartilage ring
- p.76

Book: Vet Med Term

31. The pelt of an animal refers to the

- a. Fur
 - b. Skin
 - c. Fur and skin**
 - d. None of the above
- p.207

32. Inflammation of the kidney is

- a. Nephrosis
 - b. Nephroptosis
 - c. Nephritis**
 - d. Nephropathy
- p. 151

33. The “knee” in people is known as what in horses?

- a. Hock joint
 - b. Pastern joint
 - c. Coffin joint
 - d. Stifle joint**
- p. 85

34. The surgical puncture to remove fluid from the abdomen is known as

- a. Abdominocentesis**
 - b. Abomasopexy
 - c. Anastomosis
 - d. Enterostomy
- p.129

35. Below normal levels of oxygen in an animal is known as

- a. Infarct
 - b. Hypoxia**
 - c. Hypocapnia
 - d. Thrombus
- p. 176

Commented [SKW4]: Changed Ischemia to Hyocapnia

36. The heat cycle in a female is known as

- a. Estrus cycle
 - b. Estrous cycle**
 - c. Lactogenic cycle
 - d. Follicular cycle
- p. 258

37. A greenstick fracture is also known as a/an _____

- a. Open fracture
- b. Comminuted fracture

- c. Spiral fracture
 - d. Incomplete fracture**
- p. 58

38. The term that means towards the head is

- a. Medial
 - b. Rostral
 - c. Cranial**
 - d. Caudal
- p. 32

39. _____ is a sudden involuntary contraction of some muscles caused by a brain disturbance.

- a. Seizure**
 - b. Hydrocephalus
 - c. Hypnosis
 - d. Paralysis
- p. 279

40. Another term for ear wax is

- a. Choroid
 - b. Cerumen**
 - c. Pinna
 - d. Cornus
- p.303

Book: McCurnin's

41. The restraint method known as the tail jack is used in what species?

- a. Swine
 - b. Ovine
 - c. Canine
 - d. Bovine**
- p.204

42. Which fat soluble vitamin functions mainly in the blood clotting system:

- a. B3
 - b. B12
 - c. K**
 - d. C
- p. 301

43. The blood collection tube that has EDTA in it as an anticoagulant preserves cell morphology has what color top?

- a. Red

- b. **Purple**
 - c. Blue
 - d. Green
- p.399

44. The common name for *Toxocara canis* is

- a. Whipworm
 - b. Tapeworm
 - c. **Roundworm**
 - d. Hookworm
- p. 452

45. PPE such as lead aprons, gloves, and thyroid shields are required when taking radiographs (aka x-rays) to protect the veterinary staff from

- a. Heel effect
 - b. Anode
 - c. Cathode
 - d. **Scatter radiation**
- p. 523

Commented [SKW5]: Deleted "in", added radiographs

46. Which type of injection is used to desensitize the skin with a local anesthetic or perform allergy skin testing

- a. **Intradermal**
 - b. Subcutaneous
 - c. Transdermal
 - d. Intravenous
- p. 588

47. A Coggins test is commonly used to detect which of the following, in horses?

- a. Equine Herpesvirus
 - b. Strangles
 - c. **Equine Infectious Anemia**
 - d. Colic
- p. 727

Commented [SKW6]: Rewrote question "Equine infectious anemia is more commonly referred to as" and updated answers to be more horse related

48. A _____ is used to relieve severe bloat in cattle in emergency situations.

- a. Hip lifters
 - b. **Trocar**
 - c. Cray hook
 - d. Hemostats
- p. 960

49. How often should an anesthetic machine be inspected and maintained by a trained service professional, to ensure it is operating properly?

Commented [SKW7]: Rewrote to add clarity

- a. **At least once a year**
 - b. At least every two years
 - c. At least every three years
 - d. Never. They are built to never need maintenance
- p. 1097

50. Cats and dogs have a total of _____ incisors.

- a. 6
 - b. 7
 - c. **12**
 - d. 14
- p. 1302

2023 National FFA Veterinary Science CDE – Small Animal Workstream

Ms. Carroll brings her dog Ricky in today for his annual wellness visit. He weighs 17 pounds and is 5 years old. There is a note in his chart that warns he is a fear-biter. The veterinary nurse collects pertinent information from Ms. Carroll about how Ricky is doing at home. He eats Hill's® Science Diet® adult dry dog food and is on Simparica TRIO® (*sarolaner, moxidectin and pyrantel*) monthly. Ms. Carroll will need more of this today. She doesn't travel with Ricky, except to the groomer, because he gets so fearful. Their neighbors have dogs that Ricky plays with. He has a normal appetite and normal elimination habits though lately; he has seemed itchy and restless. She would like Dr. Peelman to investigate this.

1. What breed of dog is Ricky?
 101. West Highland White terrier
 102. Scottish terrier
 103. Parson Russell terrier
 104. Cairn terrier

2. Which trait does not describe a typical terrier? ([American Kennel Club](#))
 105. Fearless
 106. Independent
 107. Shy
 108. Bold

Ms. Carroll's neighbor has two indoor pets that Ricky routinely spends time with.

3. Identify the breed of dog belonging to the neighbor?
 109. Bernese Mountain Dog
 110. Pug
 111. Beagle
 112. Pembroke Corgi

4. Identify the breed of cat belonging to the neighbor.
 113. Abyssinian
 114. Manx
 115. Russian Blue
 116. Sphynx

Ms. Carroll lets you know she recently added a new puppy to her family.

5. Identify the correct breed and AKC group combination for the picture provided.
 117. Bichon Frise – Non-Sporting Group
 118. Bichon Frise – Toy Group
 119. Pekingese - Non-Sporting Group
 120. Pekingese – Toy Group

2023 National FFA Veterinary Science CDE – Small Animal Workstream

6. Identify the breed of dog that is not typically as high energy as Ricky?
- 121. Belgian Malinois
 - 122. Doberman Pinscher
 - 123. Newfoundland
 - 124. Border Collie
7. Based on age, Ricky is currently in what life stage? (McCurnin pg. 243 9th edition)
- 125. Pediatric
 - 126. Adult
 - 127. Senior
 - 128. Geriatric
8. Convert Ricky's weight to kilograms.
- 129. 7.7 kg
 - 130. 17.4 kg
 - 131. 27.7 kg
 - 132. 37.4 kg
9. What is not part of Ricky's signalment? (McCurnin pg. 82 9th edition)
- 133. Neutered male
 - 134. Canine
 - 135. Fear biter
 - 136. 5 years old

Ms. Carroll reminds the veterinary nurse that Ricky can be fearful and act out.

10. Which behavior would you observe in an aggressive dog that you wouldn't see in fearful Ricky? (McCurnin pg. 139 9th edition)
- 137. Showing teeth
 - 138. Direct eye contact
 - 139. Growling
 - 140. Laying down

The veterinary nurse asks Ms. Carroll to further discuss her concerns. Ricky scratches his ears, rubs his face along the couch, and licks his toes often. Sometimes she notices hair loss and scaly skin patches.

11. What is most likely the underlying cause of Ricky's clinical signs? ([Merck Veterinary Manual](#))
- 141. Atopy
 - 142. Otitis externa
 - 143. Pododermatitis
 - 144. Conjunctivitis

The veterinary nurse asks if Ms. Carroll has seen Ricky paw at his mouth, drool excessively, or "chatter" his lower jaw.

2023 National FFA Veterinary Science CDE – Small Animal Workstream

12. What ailment does the nurse have in mind? (McCurnin pg. 1236 9th edition)

- 145. Arthritis
- 146. Inner ear infection
- 147. Dermatitis
- 148. Periodontal disease

The veterinary nurse starts to discuss Dr. Peelman's plan for Ricky today.

13. Which diagnostic tool is NOT a typical recommendation given during a wellness visit for dog's similar in age to Ricky? (McCurnin pg. 243 9th edition)

- 149. Blood parasite screen
- 150. Intestinal parasite screen
- 151. Survey radiographs
- 152. Physical exam

Dr. Peelman is glad Ms. Carroll has agreed to a wellness panel as Ricky's breed is predisposed to chronic hepatitis. The blood chemistry portion of a wellness panel provides indices used to determine internal organ function.

14. Which organ would chronic hepatitis affect? (McCurnin pg. 648 9th edition)

- 153. Kidneys
- 154. Pancreas
- 155. Gallbladder
- 156. Liver

Another breed predisposition is hypoadrenocorticism (Addison's disease). This is a dangerous disorder if left unchecked.

15. Abnormalities on which portion of the bloodwork would NOT signal Dr. Peelman to investigate this? (McCurnin pg. 656 9th edition)

- 157. Electrolyte panel
- 158. Glucose level
- 159. Thyroid panel
- 160. Kidney levels

16. Which commercial blood collection tube would be used for a chemistry as it does not contain an anticoagulant? (McCurnin pg. 393 9th edition)

- 161. Lavender top tube
- 162. Green top tube
- 163. Blue top tube
- 164. Red top tube

2023 National FFA Veterinary Science CDE – Small Animal Workstream

17. Which complete blood count (CBC) value would Dr. Peelman expect to see elevated if Ricky had an allergic reaction or intestinal parasites? (McCurnin pg. 383 9th edition)

- 165. Eosinophils
- 166. Platelets
- 167. Spherocytes
- 168. Monocytes

18. What is true about the “big three” of radiation safety? (McCurnin pg. 504 9th edition)

- 169. Shielding matters only with older patients.
- 170. Time means avoiding retakes, do it right the first time.
- 171. Distance means getting as close to the x-ray beam as is comfortable.
- 172. When shielding, use aprons made of a poly blend.

19. What is not associated with radiography settings? (McCurnin pg. 492 9th edition)

- 173. kVp
- 174. mAs
- 175. PACS
- 176. Thickness, cm

The veterinary nurse also collects a urine sample through cystocentesis for evaluation.

20. Which value would be elevated if Ricky developed diabetes mellitus? (McCurnin pg. 400 9th edition)

- 177. Ketones
- 178. Specific gravity
- 179. pH
- 180. Bilirubin

21. Which value indicates the kidneys are concentrating the urine properly? (McCurnin pg. 398 9th edition)

- 181. Ketones
- 182. Specific gravity
- 183. pH
- 184. Bilirubin

22. What information cannot be determined by the instrument pictured?

- 185. Grade of murmur
- 186. Respiratory rate
- 187. Heart rate
- 188. PCV

23. Which instrument can signal hyperthermia? (189-192)

- 189.
- 190. Thermometer
- 191.
- 192.

2023 National FFA Veterinary Science CDE – Small Animal Workstream

Since Ricky's ears have been bothering him, the veterinary nurse swabs his ears and prepares a slide for microscopic examination.

24. What organism did she identify?

- 193. Yeast
- 194. Ear mite
- 195. Cocci
- 196. Rods

25. Which instrument is used to examine Ricky's tympanum? (197-200)

- 197.
- 198.
- 199.
- 200. Otoscope

If left untreated, Ricky's ear infection will worsen, he'll continue to shake his head, and multiple health issues may arise.

26. Which is not associated with an untreated ear infection? (McCurnin pg. 1282 9th edition)

- 201. Aural hematoma
- 202. Anterior uveitis
- 203. Otitis media
- 204. Ruptured tympanum

27. If Ricky continues to scratch his ears, Dr. Peelman may send this home to avoid injury. (205-208)

- 205. Elizabethan collar
- 206.
- 207.
- 208.

In addition to the scales and hair loss Ms. Carroll reported, Dr. Peelman identified pustules on Ricky's abdomen during her physical exam.

28. These clinical signs are consistent with which ailment below? (McCurnin pg. 224 9th edition)

- 209. Excoriations
- 210. Mange
- 211. Dermatophytosis
- 212. Bacterial skin infection

It's time to vaccinate Ricky! He goes to the groomer every 8 weeks, so Ms. Carroll wants to make sure he has everything he needs to stay healthy.

2023 National FFA Veterinary Science CDE – Small Animal Workstream

29. Which organism does NOT contribute to canine infectious respiratory disease complex, more commonly known as “kennel cough”? (McCurnin pg. 254 9th edition)
- 213. Canine adenovirus type 2
 - 214. Canine parainfluenza virus
 - 215. **Leptospira**
 - 216. Bordetella bronchiseptica
30. Which virus is NOT considered a core canine vaccine by the American Animal Hospital Association? (McCurnin pg. 255 9th edition)
- 217. Rabies virus
 - 218. Canine parvovirus
 - 219. **Canine influenza virus**
 - 220. Canine distemper virus
31. Which vaccine is regulated across the United States to protect public health? (McCurnin pg. 253 9th edition)
- 221. **Rabies vaccine**
 - 222. Canine coronavirus vaccine
 - 223. Canine influenza vaccine
 - 224. Canine distemper vaccine
32. Most vaccines are given subcutaneously. Use the diagram provided to identify the subcutaneous layer of the skin. **(225-228)**
- 225.
 - 226.
 - 227.
 - 228.
33. Which needle is most appropriate for giving Ricky a subcutaneous injection?
- 229. 20 G x 1 1/2"
 - 230. **22 G x 3/4"**
 - 231. 14 G x 2"
 - 232. 25 G x 5/8"
34. Which syringe is most appropriate for a vaccine volume of 1 milliliter?
- 233. **3 ml syringe**
 - 234. TB syringe
 - 235. 5 ml syringe
 - 236. 6 ml syringe
35. What is the pictured equipment used for?
- 237. Urine collection
 - 238. Stool collection
 - 239. **Blood collection**
 - 240. Saliva collection

2023 National FFA Veterinary Science CDE – Small Animal Workstream

The blood parasite screening Dr. Peelman recommended checks for heartworm disease and 3 tickborne diseases.

36. What disease causes lameness, swollen joints, fever, and possibly swollen lymph nodes?

(McCurnin pg. 116 9th edition)

- 241. Ehrlichiosis
- 242. Lyme disease
- 243. Anaplasmosis
- 244. Heartworm disease

While waiting for the blood parasite screening results you decide to use your free time to remove equipment from the autoclave.

37. What piece of equipment is used to determine that the autoclave successfully sterilized the equipment? (245-248)

- 245.
- 246.
- 247. Chemical indicator strip
- 248.

Ricky was kicked by a horse recently and has been limping occasionally. The veterinarian recommends a radiograph.

38. What piece of equipment is needed for the veterinary staff to be able to take the radiograph safely? (249-252)

- 249. Muzzle
- 250.
- 251.
- 252.

39. While completing the fecal float on Ricky, you identify this abnormal finding.

- 253. Genus *Trichuris*
- 254. Genus *Dipylidium*
- 255. Genus *Toxocara*
- 256. Genus *Taenia*

Ricky has several ticks and Dr. Peelman is concerned about his risk of Rocky Mountain Spotted Fever.

40. Identify the tick in the image.

- 257. American Dog
- 258. Black Legged Deer
- 259. Brown Dog
- 260. Lonestar