



Veterinary Science

Purpose

The purpose of the New Jersey FFA Veterinary Science Career Development Event is to promote college and career readiness by providing opportunities to develop technical knowledge and demonstrate practical skills in the field of veterinary science.

Objectives

Participants will demonstrate professional ethics, decision-making, business competency, communication and problem-solving skills.

Participants will demonstrate technical competency with small and large animals in the areas of

- Anatomy and physiology.
- Clinical procedures.
- Identification.
- Health and safety.
- Medical terminology.
- Veterinary math applications.

Event Rules

The complete rules, policies and procedures relevant to all New Jersey FFA Career and Leadership Development Events may be found in the CDE & LDE Event Participation Policy:

https://nj.gov/agriculture/ag_ed/ffa/activity/CDE_LDE_Policy.pdf

- Teams will consist of four members, and all four scores will count toward the team score.
- The team score is comprised of the combined scores of each individual and the team activity in which all team members will participate.
- All participants must wear either scrubs (solid-color tops and bottoms) or a polo with slacks for the practical application of the event. All participants must wear closed-toe, closed-heel and flat shoes (no clogs, sandals or flip-flops). For safety and sanitary reasons, jewelry will be limited to stud earrings, a plain wedding band, and a medical alert bracelet or necklace. Bracelets, necklaces, and dangling earrings are prohibited during the competition.
- Under no circumstances will any participant be allowed to touch or handle identification items or other specimens during the event except as expressly permitted in certain practicums.
- Any communication between participants during the event will be sufficient cause to eliminate the team from the event.
- Any participant caught cheating during the event will be expelled from the event.
- Participants are NOT allowed to use (or have visible) electronic devices during the event, unless for medical reasons or a portion of the event requires usage. This includes cell phones, tablets, etc. Participants will be allowed to use calculators, if specified for that event; however, cell phone calculators and graphing calculators are not permitted! Failure to adhere to these rules will result in disqualification.
- All individuals participating will judge in a cooperative manner following the rules set forth by the event coordinator.
- No school/chapter will use Rutgers University or Delaware Valley University facilities or locations for the training of teams. Contact with University faculty and staff is permissible.
Penalty will be disqualification.

- This event will be scored using “Scan-tron” sheets. It is important for students to listen to directions and fill out the sheets correctly in order to receive credit. Sample scan-tron sheets are available for practice on the State Activity Guide. This event uses the Horticulture (Multipurpose #105482) scan-tron sheet.
- There will be no separate alternate teams.
- A student may not compete in more than one event during the New Jersey FFA Spring Career Development Events.
- The State level competition fee of \$11 per contestant will be paid by the competing school. If a chapter is at least blue affiliated, registration to state FFA career development events is waived.

TOOLS AND EQUIPMENT

Materials to be provided by the student:

- Two no. 2 pencils
- Calculator (cell phone and programmable calculators will not be permitted)
- Clipboard

FFA will provide the specific tools and equipment needed to complete practicums.

Any participant in possession of an electronic device in the event area is subject to disqualification.

Event Format

ANNUAL FOCUS AREAS

The Veterinary Science Career Development Event (CDE) focuses on one case-based scenarios that integrate general knowledge, identification, clinical practice, handling/restraint skills, and team activities. **For annual event details and resources for event preparation, refer to the [2025 Scenario Resource Guide](#).**

FLOW OF EVENT

- Written Exam, Math Applications Exam & Identification (partial) – 60 minutes
- Practicums (1 Handling and 1 Clinical) and Identification (partial) – 60 minutes
- Team Activity – 40 minutes

INDIVIDUAL ACTIVITIES - 300 POINTS

GENERAL KNOWLEDGE

The objective of general knowledge is designed to determine team members' broad understanding of the veterinary science field. General knowledge will be demonstrated during the history and scenario demonstrations.

Topics for the exam may include the following:

- Behavior
- Disease (causes and sources, signs and clinical signs)
- Medical records
- Medical terminology
- Anatomy/physiology/radiology
- Body Condition Score: Dog, Cat, Beef Cattle, Dairy Cattle, Equine
- Regulations (OSHA: Federal Occupational Safety and Health Administration; GHS: Globally Harmonized System for Hazard Communication; SDS: Safety Data Sheets)
- Patient management
- Facility management

- Practice management
- Genetics
- Nutrition
- Husbandry

MATH APPLICATIONS

The math applications will vary based on scenario. Questions may include conversions, dose calculations dilutions, cost calculations and invoices.

IDENTIFICATION

Participants will identify equipment, parasites, breeds/species, and anatomy/physiology/radiology. Identification lists are located at the end of this handbook.

- *Equipment*
Participants will identify pieces of equipment (actual equipment and photos). They will also need to have general knowledge about the use for each item.
- *Parasites/Microscopic*
Participants will identify parasites (specimen and photos) and explain the life cycles of selected parasites. Participants will identify microscopic organisms.
- *Breeds*
Participants will identify breeds of small and large animals (photos).
- *Anatomy/Physiology/Radiology*
Participants will identify anatomical structures of clinical relevance, focusing on the areas outlined in the [Scenario Resource Guide](#).

PRACTICUMS

Participants will be given one clinical and one handling /restraint activity to complete. Five minutes will be allotted for each activity. Participants are expected to talk through the steps to a judge as they are being scored. Judges may ask participants for clarification on steps performed.

CLINICAL APPLICATIONS (50 POINTS)

- | | |
|---|--|
| ○ Administer Oral Tablets/Capsule | ○ Fecal Flotation with Fecalyzer |
| ○ Administering Aural Medication | ○ Filling a Syringe for Injection |
| ○ Administering an Intramuscular Injection | ○ Fine Needle Biopsy - Aspirate |
| ○ Administering Ophthalmic Medication | ○ Opening a Surgery Pack |
| ○ Administering a Subcutaneous Injection | ○ Prepare a Surgical Pack for Sterilization |
| ○ Applying an Electronic Ear Tag to Livestock | ○ Prescription Filling |
| ○ Applying a Standing Wrap on a Horse | ○ Removal of Sutures |
| ○ Bandage Removal | ○ Surgical Site Preparation |
| ○ Cystocentesis in Companion Animals | ○ Swabbing a Lesion |
| ○ Ear Notching for Identification in Piglets | ○ Using a Microscope-Dry *New |
| | ○ Using a Microscope-Oil Immersion *New |

HANDLING AND RESTRAINING (30 POINTS)

- | | |
|---|---|
| ○ Applying a Cat Muzzle | ○ Restraint of a Pig |
| ○ Applying a Lead Chain on a Horse Under the Chin | ○ Restraint of a Rabbit |
| ○ Applying Elizabethan Collar | ○ Restraint of the Cat for Cephalic IV Catheter Placement |
| ○ Applying Gauze Dog Muzzle | ○ Restraint of the Cat for Jugular |

- Applying Nylon Dog Muzzle
- Haltering a Horse
- Haltering Ruminants
- Lifting a Hind Foot of a Horse
- Placing a Tail Tie
- Removing a Cat from a Cage and Wrap in a Fear-Reduced Manner ***Updated**
- Removing Dog from Floor Level Cage to Restrain for Lateral Saphenous Venipuncture
- Venipuncture
- Restraint of the Cat in Lateral Recumbency for Femoral Venipuncture
- Restraint of the Dog for Cephalic Venipuncture
- Restraint of the Small Dog for Jugular Venipuncture
- Snare Restraint of the Pig

TEAM ACTIVITY (200 POINTS)

Teams will utilize the information they gathered from the scenario(s) presented during the individual activities to complete the team activity. After each student completes their individual components, the team will convene to discuss the scenario they just completed. Students may be provided additional data needed to present their findings as a team. The team will have 40 minutes to respond to the prompts and finalize their findings.

Resources provided for the team activity may include diagnostic information like blood work, synopsis of disease state, treatment recommendations and cost information. The team should be prepared to direct their findings in a variety of manners that could include presenting to a client, general public or a veterinary professional.

Scoring

| Activities | Individual Points | Team Points |
|---|-------------------|-------------|
| Written exam, Identification, Math Applications | 300 | 1200 |
| Handling and restraining practicum | 30 | 120 |
| Clinical procedures practicum | 50 | 200 |
| Team activity | | 200 |
| TOTAL | 380 | 1,720 |

TIEBREAKERS

If ties occur, the following events will be used in order to determine award recipients:

Teams

1. Team Activity
2. Combined general knowledge
3. Combined Practicum

Individuals

1. Combined general knowledge
2. Combined Practicum

Awards

Awards will be presented to individuals and the first team based on their rankings at the CDE awards ceremony at the New Jersey State FFA Convention. Awards are sponsored by the National FFA Foundation and the New Jersey FFA Association.

Team

- Plaque Sponsored by the National FFA Foundation – 1st place

Individual

- Overall Medals
 - Medals – Top three individuals
- H.O. Sampson Certificates (hands-on sections ONLY)
 - Certificate – Top five individuals

The 1st place team will represent New Jersey at the Big E in September and the National FFA Convention in October.

References

This list of references is not intended to be all-inclusive.

Other sources may be utilized, and teachers are encouraged to make use of the very best instructional materials available. Make sure to use discretion when selecting website references by only using reputable, proven sites. The following list contains references that may prove helpful during event preparation. The most current edition of resources will be used.

Past CDE materials and other resources are available by logging in to FFA.org.

- Small Animal Care and Management. Warren. ISBN: 978-1-4180-4105-2
- McCurnin's Clinical Textbook for Vet Technicians, 8th edition. ISBN 978-1-4377-2690-0
- Laboratory Procedures for Veterinary Technicians, 7th edition, Sirois, Margi. ISBN 9780323595384
- Veterinary Instruments and Equipment: A Pocket Guide. Sonsthagen. ISBN: 978-0323032032
- American Kennel Club, <http://www.akc.org/index.cfm>
- Cat Fanciers' Association, <https://cfa.org/breeds/>
- American Rabbit Breeders Association, <http://www.arba.net/>
- Cattle Breeds, <http://afs.okstate.edu/breeds/>
- Medical Mathematics and Dosage Calculations for Veterinary Professionals. Bill, Robert. ISBN: 978-08138263
- National Vet Science Math Practicum Units of Measurement, common formulas and conversions for students to use as they may appear on the Math Practicum, FFA.org
- <https://todaysveterinarypractice.com/>
- atdove.com
- Cat & Dog: <https://www.purinainstitute.com/centresquare/nutritional-and-clinical-assessment/purina-body-condition-system>
- Horse: <https://ker.com/wp-content/uploads/body-condition-score-chart.pdf>
- Microscopes: <https://www.ncbionetwork.org/educational-resources/videos/use-and-care-microscope>

Request for Reasonable Accommodations

The New Jersey FFA Association is committed to providing equal access to our events and activities for all people. Use this form to request a reasonable accommodation or assistance at least 3 weeks before any state-level events: <https://form.jotform.com/NJFFA/accommodations-request>. A new form will need to be submitted for each event in which a reasonable accommodation is being requested. This information will be kept confidential and will be used only to process the request. Our staff will review the request upon receipt and contact the requestor with additional information. The association cannot guarantee accommodations or assistance if a form is received less than 3 weeks before an event. Accommodations being requested that require the assistance of another person (nurse, interpreter, scribe, reader, etc.) is the responsibility of the school/requestor. It is also the school/requestor's responsibility to provide any approved equipment to aide in the accommodation process, if applicable.

Artificial Intelligence (AI) Policy and Guidelines

The standard operative procedures allow FFA members to use AI tools to assist them in their learning. Appropriate uses of AI may include generating ideas for any FFA-related assignment, project, contest and award application; checking facts of a phenomenon; or checking for and correcting grammatical errors in a paper written by a member. Specific guidelines for appropriate use, including examples, is provided in the policy. To ensure clarity, a statement outlining ethical AI utilization will be added to program handbooks. Non-compliance with this policy represents plagiarism and will automatically disqualify a member.

Please visit the State Activity Guide, [Artificial Intelligence \(AI\) Policy 1.007](#) to view the full guidelines and best practices.

Professional Integrity

FFA members participating in New Jersey FFA programs and events understand and agree that all work must result from their own effort and ability, created, and completed alone (except for partner or chapter applications). When outside sources (direct quotes or phrases, specific dates, figures, or other materials) are used for a project, document, or application, the required reference citation must be completed according to the rules specified by the applicable handbook.

While participating in National FFA programs, FFA members are prohibited from:

- Plagiarizing
- Violating copyright
- Cheating
- Falsifying information
- Using another person's results or thoughts as their own, even with this person's permission. This includes work done by a family member or a mentor.
- Using information or data obtained from the internet without proper citation.

Any attempt to gain an unfair advantage will not be tolerated. Non-compliance represents plagiarism and will automatically disqualify a member.

Equipment and Materials Identification List

- | | |
|---------------------------------------|---------------------------------------|
| 100. Anesthetic machines | 135. Forceps — Rat tooth thumb |
| 101. Autoclave | 136. Forceps —Rochester Carmalt |
| 102. Autoclave tape indicator | 137. Hog snare |
| 103. Backhaus towel clamps | 138. Hoof knife |
| 104. Balling gun | 139. Hoof rasp |
| 105. Bandaging material — Elasticon | 140. Humane Twitch |
| 106. Bandaging material — roll gauze | 141. IV Fluid Bag |
| 107. Bandaging material — vet wrap | 142. Large Animal Ear Tagger |
| 108. Bands (castration or docking) | 143. Muzzle — basket |
| 109. Cat Bag | 144. Muzzle — nylon |
| 110. Catheter — IV | 145. Needle holder — Olsen-Hegar |
| 111. Catheter — Tomcat urinary | 146. Obstetrical chain and handle |
| 112. Cattle Handling Restraint Device | 147. Ophthalmoscope |
| 113. Cautery | 148. Otoscope |
| 114. Centrifuge | 149. Pig tooth nippers |
| 115. Chemical indicator strips | 150. Rumen magnet |
| 116. Dehorner — Barnes | 151. Scalpel blade |
| 117. Dehorner — electric | 152. Scalpel handle |
| 118. Dental scaler | 153. Scissors — Lister bandage |
| 119. Dental/Power Float | 154. Scissors — Mayo dissecting |
| 120. Large Animal Ear Tagger | 155. Scissors — Metzenbaum dissecting |
| 121. Ear notcher | 156. Scissors — Utility Bandage |
| 122. Elastrator | 157. Silver nitrate sticks |
| 123. Electronic ID Reader | 158. Snook ovariohysterectomy hook |
| 124. Elizabethan collar | 159. Speculum — Equine |
| 125. Emasculators | 160. Speculum — Frick/Bovine |
| 126. Endotracheal tubes | 161. Staple remover |
| 127. Fecal loop | 162. Stethoscope |
| 128. Fecalyzer | 163. Syringe — automatic, multi-dose |
| 129. Fetal extractor — calf | 164. Syringe — Leur Lock |
| 130. Forceps — Allis tissue | 165. Syringe — Slip Tip |
| 131. Forceps — Babcock tissue | 166. Tattooing instruments |
| 132. Forceps — Brown-Adson thumb | 167. Thermometer |
| 133. Forceps — Crile | 168. Tonometer |
| 134. Forceps — Kelly | 169. Trocar and cannula |

Parasite/Microscopic Identification List

200. Avian red blood cell (erythrocyte)
201. Calcium oxalate crystals
202. Cat Warble (Genus *Cuterebra*)
203. Cocci (bacteria)
204. Coccidia (Genus *Isoospora* or *Eimeria*)
205. Demodectic Mite (Genus *Demodex*)
206. Ear Mite (Family *Psoroptidae*; Genus *Otodectes*)
207. Eosinophils
208. Flea Tapeworm Egg (Genus *Dipylidium*)
209. Flea Tapeworm Segment (Genus *Dipylidium*)
210. Giardia (Genus *Giardia*)
211. Heartworm Adult (Genus *Dirofilaria*)
212. Heartworm Microfilaria (Genus *Dirofilaria*)
213. Hookworm Adult (Family *Ancylostomatidae*; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
214. Hookworm Egg (Family *Ancylostomatidae*; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
215. Horse Strongyles (Family *Strongylidae*; Genus *Strongylus*)
216. Liver Fluke (Class Trematoda; Genus *Fasciola*, *Fascioloides* or *Dicrocoelium*)
217. Mammalian red blood cells (erythrocyte)
218. Mast cells
219. Mosquito Larva (Family *Culicidae*; Genus *Anopheles*, *Culex* or *Aedes*)
220. Neutrophils
221. Platelets
222. Rods (bacteria)
223. Roundworm Adult (Family *Ascarididae* or *Toxocaridae*; Genus *Toxocara*, *Toxascaris*, *Ascaris*, *Parascaris* or *Neoascaris*)
224. Roundworm Egg (Family *Ascarididae* or *Toxocaridae*; Genus *Toxocara*, *Toxascaris*, *Ascaris*, *Parascaris* or *Neoascaris*)
225. Sarcoptic Mite (Family *Sarcoptidae*; Genus *Sarcoptes* or *Notoedres*)
226. Struvite crystals (triple magnesium phosphate)
227. Taenia Tapeworm Egg (Family *Taeniidae*; Genus *Taenia*)
228. Taenia Tapeworm Segment (Family *Taeniidae*; Genus *Taenia*)
229. Tick — American Dog (Family *Dermacentor*; Genus *variabilis*)
230. Tick — Black Legged Deer (Family *Ixodes*; Genus *scapularis*)
231. Tick — Brown Dog (Family *Rhipicephalus*; Genus *sanguineus*)
232. Tick — Lone Star (Family *Amblyomma*; Genus *americanum*)
233. Urate crystals
234. Whipworm Egg (Genus *Trichuris*)
235. Whipworm (Genus *Trichuris*)
236. Yeast (cytology)

Breed/Species Identification List

DOGS

Herding Group

- 300. Australian Cattle Dog
- 301. Australian Shepherd
- 302. Border Collie
- 303. Collie
- 304. German Shepherd Dog
- 305. Old English Sheepdog
- 306. Pembroke Corgi

Hound Group

- 307. Basset Hound
- 308. Beagle
- 309. Bloodhound
- 310. Dachshund
- 311. Greyhound
- 312. Rhodesian Ridgeback

Non-Sporting Group

- 313. Bichon Frise
- 314. Boston Terrier
- 315. Bulldog
- 316. Chow Chow
- 317. Dalmatian
- 318. Poodle

Sporting Group

- 319. Brittany Spaniel
- 320. Cocker Spaniel
- 321. English Setter
- 322. German Shorthaired Pointer
- 323. Golden Retriever
- 324. Irish Setter
- 325. Labrador Retriever
- 326. Weimaraner

Terrier Group

- 327. Bull Terrier
- 328. Cairn Terrier
- 329. Parson Russell Terrier
- 330. Scottish Terrier
- 331. West Highland White Terrier

Toy Group

- 332. Cavalier King Charles Spaniel
- 333. Chihuahua
- 334. Miniature Pinscher
- 335. Papillon
- 336. Pekingese
- 337. Pomeranian
- 338. Toy Poodle
- 339. Pug
- 340. Shih Tzu
- 341. Yorkshire Terrier

Working Group

- 342. Bernese Mountain Dog
- 343. Boxer
- 344. Doberman Pinscher
- 345. Great Dane
- 346. Great Pyrenees
- 347. Mastiff
- 348. Newfoundland
- 349. Rottweiler
- 350. Saint Bernard
- 351. Siberian Husky

CATS

- 352. Abyssinian
- 353. American Shorthair
- 354. Burmese
- 355. Maine Coon
- 356. Manx
- 357. Persian
- 358. Ragdoll
- 359. Russian Blue
- 360. Siamese
- 361. Sphynx

BIRDS

- 362. African Gray Parrot
- 363. Canary
- 364. Cockatiel
- 365. Cockatoos
- 366. Love Birds
- 367. Macaw
- 368. Parakeet
- 369. Sun Conure
- 370. Zebra Finch

REPTILES

- 371. Bearded Dragon
- 372. Chameleon
- 373. Gecko
- 374. Iguana
- 375. Ball Python
- 376. Burmese Python
- 377. Corn Snake

POULTRY

- 378. Chicken — Cornish
- 379. Chicken — Leghorns
- 380. Chicken — Plymouth Rock
- 381. Chicken — Rhode Island Red
- 382. Duck
- 383. Turkey

SMALL MAMMALS

- 384. Ferret
- 385. Guinea Pig
- 386. Hamster
- 387. Hedgehog
- 388. Mouse
- 389. Rat

RABBITS

- 390. Angora
- 391. Californian
- 392. Dutch
- 393. English Spot
- 394. Holland Lop
- 395. Mini-Rex
- 396. Netherland Dwarf
- 397. New Zealand

DAIRY CATTLE

- 398. Ayrshire
- 399. Brown Swiss
- 400. Guernsey
- 401. Holstein
- 402. Jersey

BEEF CATTLE

- 403. Angus
- 404. Brahman
- 405. Charolais
- 406. Hereford
- 407. Shorthorn

HORSE

- 408. Appaloosa
- 409. Arabian
- 410. Belgian
- 411. Clydesdale
- 412. Morgan
- 413. Paint
- 414. Percheron
- 415. Quarter Horse
- 416. Saddlebred
- 417. Tennessee Walking Horse
- 418. Thoroughbred

GOAT

- 419. Nubian
- 420. Angora
- 421. Boer
- 422. LaMancha

SHEEP

- 423. Columbia
- 424. Dorper
- 425. Dorset
- 426. Hampshire
- 427. Merino
- 428. Rambouillet
- 429. Southdown
- 430. Suffolk

SWINE

- 431. American Landrace
- 432. Berkshire
- 433. Chester White
- 434. Duroc
- 435. Hampshire
- 436. Yorkshire

Team Activity Rubric

200 POINTS

| Indicator | Very strong evidence of skill 5–4 points | Moderate evidence of skill 3–2 points | Weak evidence of skill 1–0 points | Points Earned | Weight | Total Score |
|---------------------------------|--|---|---|---------------|---------------------|-------------|
| Content – 200 points | | | | | | |
| Veterinary topic research | Demonstrates prior research and preparedness of the veterinary topic | Demonstrates some prior research and preparedness of the veterinary topic | Does not demonstrate prior research and preparedness of the veterinary process. | | X 5 | |
| | Full understanding of disease and/or veterinary process | Some understanding of disease and/or veterinary process | Does not understand the disease and/or veterinary process | | X 5 | |
| | Full understanding of treatment protocols and/or recommendation for the topic | Some understanding of treatment protocols and/or recommendation for the topic | Does not understand the treatment protocols and/or recommendation for the topic | | X5 | |
| Demonstrates knowledge of topic | Responses support strong knowledge of the subject with good evidence of support. | Responses support some knowledge of the subject with fair evidence of support. | Responses support little knowledge of the subject with poor evidence of support. | | X 15 | |
| Message | Communicates ideas extremely clearly as well as extremely focused. Thoughts are very interesting and understandable. • All main ideas are supported by clear and vivid details. • Clearly organized and concise by remaining on target, is completely focused with obvious construction and strong introduction, body and conclusion layout. | Communicates ideas clearly and concisely, and message is interesting and understandable. • Most of the main ideas are supported by sufficient details. • Good organization with few statements out of place or lacking in clear construction. | Communicates ideas clearly, but message is difficult to understand. • None of the main ideas are supported by sufficient details. • Little to no organization is present and is sometimes awkward and lacking construction. | | X5 | |
| Spelling/grammar | Spelling and grammar are extremely high quality. • Two or fewer spelling errors are present. • Two or fewer grammar errors are present. | Spelling and grammar are adequate. • Three to five spelling errors are present. • Three to five grammar errors are present. | Spelling and grammar are less than adequate. • Six or more spelling errors are present. • Six or more grammar errors are present. | | X5 | |
| | | | | | TOTAL POINTS | |

Clinical Procedures Practicum

ADMINISTER ORAL TABLET/CAPSULE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| The student reads and interprets the veterinarian's order. | 10 | |
| The student selects the correct drug and concentration. | 15 | |
| The student is able to open the mouth of the animal. | 5 | |
| The student maintains control of the head or muzzle during the administration of the medication. | 5 | |
| The student uses an appropriate technique to encourage the patient to swallow. | 5 | |
| The student is able to control the animal in a manner that is adequate to administer the medication yet did no harm to the patient. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

ADMINISTERING AURAL MEDICATION

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| The student successfully administered the proper amount of medication into the ear canal. <ul style="list-style-type: none"> • Ear pinna held upright • Correct amount of medication was administered without contamination | 20 | |
| The student massages the base of the outside of the ear canal causing a swishing sound from the medication moving around in the ear canal. | 15 | |
| The student wipes any solution that may have leaked onto the outside of the ear flap or hair. | 10 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

ADMINISTERING AN INTRAMUSCULAR INJECTION

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student selected the proper site for administration. | 10 | |
| The student directs the needle through the skin and into the muscle. | 10 | |
| The student aspirates; if no blood is noted, injects. | 10 | |
| The student withdraws the needle and places in the sharps container. | 10 | |
| The student massages the area where the injection was given and praises the patient. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

ADMINISTERING OPHTHALMIC MEDICATION

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student wipes any discharge from the patient's eye using a gauze sponge or cotton ball. | 8 | |
| The student opens the end of the ophthalmic medicine. | 3 | |
| The student uses the index finger and thumb to pull the upper and lower lids apart to open the eye. The student's thumb pulls the lower lid down and the index finger pulls the upper lid upward. The student's other finger may rest on the head of the animal. | 12 | |
| While resting the hand holding the medication on the head of the patient, the student applies the drops or ointment gently into the eye without touching the eye, counting each drop or applying the proper amount of ointment without contamination. | 12 | |
| The student releases the eyelids. | 5 | |
| The student allows the animal to blink to move the medication throughout the eye. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

ADMINISTERING A SUBCUTANEOUS INJECTION

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student lifts the skin using the thumb and forefinger forming a triangle or tent with the skin. | 10 | |
| The student inserts the needle into the skin at the base of the tent or triangle parallel to the body. | 10 | |
| The student aspirates, looking for any signs of blood entering the syringe; if no blood enters the syringe, the student administers the injection. | 10 | |
| The student withdraws the needle and places in the sharps container. | 10 | |
| The student rubs the injection site and praises the patient. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

APPLYING AN ELECTRONIC EAR TAG TO LIVESTOCK

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student assembles the correct material for applying an electronic ear tag. (Tagger, female and male electronic tag components, and antiseptic/disinfectant solution.) | 4 | |
| The student loads the tag by depressing the tagger's spring clip and inserting the female component of the electronic tag, ensuring the raised portion of the tag is placed in the open portion of the jaws. | 5 | |
| The student continues to load the tagger by slipping the male component of the electronic tag completely onto the blunt applicator pin. | 5 | |
| The student lightly squeezes the jaws together to ensure the two tag components align. | 5 | |
| The student dips the jaws of the tagger (with tag) into an antiseptic/disinfectant solution. | 4 | |
| Without quick movements and loud noises, the student properly approaches the restrained patient and verifies the application site is free of foreign debris and avoids previously tagged locations. | 5 | |
| The tagger is positioned in the correct application site, vertically in the middle of the ear, between two cartilaginous ribs, and 2/3 from the outside edge of the ear and 1/3 from the head. The female portion of the tag should be on the inside of the ear. | 12 | |
| Confidently, squeeze the tagger's handles and apply the tag to the correct application site. Remove the tagger from the applied tag. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Resource: https://www.allflex.global/na/wp-content/uploads/sites/7/2021/08/EIDApplicationGuide_CINS1601_R5_USDA.pdf

Clinical Procedures Practicum

APPLYING A STANDING WRAP ON A HORSE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| The student assembles the correct material for applying a standing wrap. (No-bow wraps aka quilts and standing wrap) | 8 | |
| The student places the edge of the first layer along the inside of the cannon bone and wraps ensuring they do not create any restriction of the joints above or below the wrap. | 7 | |
| The student continues around the lower leg of the horse making sure to apply even pressure with no wrinkles and keeps the proximal and distal edges of the wrap even. | 6 | |
| The student starts the next layer halfway down the leg, in the same direction as the first layer, and ensures the wrap is even and lays flat. | 6 | |
| The student pulls the wrap snugly over the cannon bone and continues to wrap distally applying steady and even pressure. | 6 | |
| The student overlaps the bandage evenly, so no pressure points are created. | 6 | |
| The student leaves ½" of the first layer showing when they reach the fetlock then continue to wrap then limb proximally. | 3 | |
| Once the student reaches the proximal edge, they leave ½" of the first layer showing an wrap down the leg until the wrap can be secured with the Velcro strap. | 3 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Resource: <https://www.farmhousetack.com/blogs/barn-blog/how-to-wrap-a-standing-wrap>

Clinical Procedures Practicum

BANDAGE REMOVAL

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| The student chooses the bandage scissors and holds in proper orientation. | 8 | |
| The student keeps the blade flat against the body and the tip raised slightly upward in contact with bandage. | 10 | |
| The student begins cutting each layer from the distal end moving proximally. | 10 | |
| The student gently removes each layer of bandage. | 7 | |
| The student notes the status of the unbandaged area and states if it is normal or if there are any problems. | 6 | |
| The student cleans up work area. | 4 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

CYSTOCENTESIS IN COMPANION ANIMALS

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student places the patient in dorsal recumbency. | 5 | |
| The student palpates the bladder to assess its size and location. | 8 | |
| The student cleans the surface of the skin with alcohol. | 5 | |
| The student palpates and immobilizes the bladder. | 5 | |
| The student inserts the needle Dorso caudally into the caudal abdomen. | 10 | |
| The student gently aspirates urine into the syringe. | 5 | |
| The student releases suction after the sample has been obtained. | 5 | |
| The student withdraws the needle from the abdomen. | 2 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

EAR NOTCHING FOR IDENTIFICATION IN PIGLETS

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| The student assembles the correct material for ear notching a piglet. | 5 | |
| The student uses their forearm to secure the piglet against their body with the same hand wrapped around the piglet's neck and head, thumb on one side and index finger securing the ear. | 7 | |
| The student uses their other hand to operate the tool used for notching. | 3 | |
| The student notches the piglet's right ear to indicate the litter. | 5 | |
| The student notches the piglet's left ear to indicate pig. | 5 | |
| The student ensures the notches indent from the edge of the ear by 0.25". | 5 | |
| The student ensures the notches are 0.25" from each other. | 5 | |
| The student disinfects the notching tool before notching the next piglet. | 5 | |
| The student briefly explains aftercare (observe twice a day for overall health and attitude, bleeding, littermates chewing on ears). | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |



Clinical Procedures Practicum

FECAL FLOTATION WITH FECALYZER

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student selects about 1/4 teaspoon of feces and places it into a fecalyzer. | 5 | |
| The student adds enough flotation solution to fill the fecalyzer about half full. | 6 | |
| The student mixes the feces into solution until no large fecal particles remain. | 6 | |
| The student places insert into fecalyzer. | 6 | |
| The student fills the vial with more solution until there is a visible meniscus at the top. | 6 | |
| The student places a cover slip on top of the fecalyzer. | 6 | |
| The student allows the vial to sit undisturbed for 10 to 15 minutes. | 5 | |
| The student carefully removes the cover slip without tilting it and places it on a microscope slide. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

FILLING A SYRINGE FOR INJECTION

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student determines the amount to be placed in the syringe. | 6 | |
| The student selects the proper-sized syringe. | 8 | |
| The student inserts the syringe into the top of the bottle. | 5 | |
| The student places the bottle upside down in one hand and holds securely. | 6 | |
| The student withdraws the proper volume. | 6 | |
| The student removes the syringe from the bottle. | 4 | |
| The student gently taps or snaps the edge of the syringe to remove any air bubbles or slightly expels the air by pushing the end of the plunger. | 6 | |
| The student places syringe in the sharps container. | 4 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

FINE NEEDLE BIOPSY - ASPIRATE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student stabilizes the mass. | 5 | |
| The student inserts the needle into the mass. | 5 | |
| The student retracts the plunger on the syringe to create negative pressure. | 10 | |
| The student redirects the needle several times without removing the needle from the mass. | 10 | |
| While maintaining negative pressure, the student removes the needle from the mass. To maintain negative pressure, hold the plunger in place. | 10 | |
| The student removes the needle from the syringe for slide preparation. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

OPENING A SURGERY PACK

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student places the surgery pack on a clean, dry surface. | 4 | |
| The student removes or tears the tape securing the package. | 4 | |
| The student opens the first flap away from them. | 8 | |
| The student opens the side flaps without reaching across open pack. | 8 | |
| The student opens the last flap toward them. | 8 | |
| The student opens the pack without contamination. | 10 | |
| The student steps away so the surgeon or scrub nurse can complete the opening of the pack. | 3 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

PREPARE A SURGICAL PACK FOR STERILIZATION

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student gathers the appropriate instruments and instrument pan if applicable. | 5 | |
| The student gathers additional supplies if applicable. | 10 | |
| The student selects the appropriate packaging material and chemical indicator. | 10 | |
| The student assembles the pack correctly by following the instructions on the checklist or recipe. | 10 | |
| The student places the chemical indicator in the correct area of the pack. | 10 | |
| The student properly wraps, secures and labels the pack. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

PRESCRIPTION FILLING

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student reads and verbally interprets prescription. | 8 | |
| The student selects the correct drug and concentration. | 17 | |
| The student places the pill counting tray on the pharmacy counter with the channel to the left and the open plate in front of him or her. | 1 | |
| The student pours the medication tablets or capsules onto the tray plate. | 1 | |
| The student opens the channel cover. | 1 | |
| The student uses a spatula or tongue depressor to push groups of tablets or capsules into the channel. | 1 | |
| When the student has counted the desired amount of medication, he or she closes the channel cover. The student tilts the tray to return the unused medicine into the stock bottle. | 4 | |
| The student lifts the tray to place the channel spout into the medicine vial and transfers medication. | 4 | |
| The student places the lid on the vial and sets it on the counter. | 1 | |
| The student appropriately fills out label with prescription information. | 7 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

REMOVAL OF SUTURES

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student clearly visualizes and inspects the incision site. | 10 | |
| If there are problems with the incision site, the student informs the veterinarian. If there are no problems, the student removes the sutures. | 10 | |
| The student chooses the correct tool to remove the sutures. | 10 | |
| The student places the curved blade underneath the suture for removal and removes the suture. | 10 | |
| The student does not cause unnecessary harm or discomfort to the patient. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

SURGICAL SITE PREPARATION

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student applies antiseptic scrub to clipped area. | 6 | |
| The student preps the clipped area with a clean surgical sponge beginning at the incision site moving in a circular motion and works toward the edges. | 8 | |
| The student does not bring the sponge back to the incision site once it is moved away from the incision site. | 8 | |
| The student discards the sponge once it reaches the edge of the clipped area. | 5 | |
| The student wipes the clipped area with a rinse solution using a clean surgical sponge following the same pattern as when scrubbing with the antiseptic. | 8 | |
| The student repeats the scrub and rinse a minimum of three times or until the final rinse sponge was clean. | 10 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Clinical Procedures Practicum

SWABBING A LESION

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| The student assembles the correct material for swabbing a lesion. (sterile swab and tube with appropriate transport media). | 5 | |
| The student aseptically removes the swab by opening the outer packaging and grasping the handle end of the swab. | 5 | |
| The student inserts/places the swab in/on the lesion of concern and rotates the swab for 5 seconds, avoiding causing any additional trauma and bleeding. The student should avoid contacting the swab with non-lesioned surfaces. | 14 | |
| The student removes the swab from the lesion and places the swab directly into the collection tube ensuring the swab end is within the transport media. The swab should be vigorously swirled within the transport media. | 8 | |
| When withdrawing the swab, the student should reduce the amount of transport media that has been absorbed within the swab by pressing the swab along the side of the tube. | 8 | |
| The student should label the tube with the animal's identification number and promptly chill the tube for shipment. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Adapted Resource: <https://www.securepork.org/Resources/Nasal-Swabs.pdf>

Clinical Procedures Practicum

USING A MICROSCOPE-DRY *NEW IN 2025

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| The student secures the glass slide onto the stage and powers on the light source. | 4 | |
| The student follows the “low to high rule” and chooses the Lowest (scanning) objective first. | 4 | |
| The student keeps both eyes open and looks through the eye pieces, adjusting the distance until they see one circle of light. | 9 | |
| The student controls the amount of light by adjusting the diaphragm and condenser. | 5 | |
| The student uses the stage controls to move the target specimen into the center of view. | 9 | |
| The student adjusts the coarse focus to get the specimen into view, then the fine focus to achieve a sharper image of the specimen. | 9 | |
| The student achieves a closer look by moving to a higher power objective and using the fine focus again for the sharpest image. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Resources: <https://www.ncbionetwork.org/educational-resources/videos/use-and-care-microscope>

Clinical Procedures Practicum

USING A MICROSCOPE-OIL IMMERSION *NEW IN 2025

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student secures the glass slide onto the stage and powers on the light source. | 2 | |
| The student follows the “low to high rule” and chooses the lowest (scanning) objective first. | 2 | |
| The student keeps both eyes open and looks through the eye pieces, adjusting the distance until they see one circle of light. | 7 | |
| The student controls the amount of light by adjusting the diaphragm and condenser. | 4 | |
| The student uses the stage controls to move the target specimen into the center of view. | 3 | |
| The student adjusts the coarse focus to get the specimen into view, then the fine focus to achieve a sharper image of the specimen. Repeat these steps with each dry objective. | 9 | |
| The student turns the nose piece, so it sets between the 40X and 100X (oil immersion) objectives and carefully places a drop of oil onto the slide over the specimen. | 5 | |
| The student looks from the side of the stage and uses the fine focus to make contact between the lens and the oil. The lens must not touch the glass slide. Looking through the eye pieces, the student uses the fine focus to achieve the sharpest image. | 8 | |
| The student lowers the stage, removes the slide, and uses lens paper to clean oil lens. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 50 | |

Resources: <https://www.ncbionetwork.org/educational-resources/videos/use-and-care-microscope>

Handling and Restraining Practicum

APPLYING A CAT MUZZLE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| The student opens the cage door and calls the cat by name. | 1 | |
| The student presents a closed hand to the cat to allow it to sniff their hand, strokes the cat on the head and neck, slides hand under the thorax to lift the fore quarters and gently draws the cat towards them while using the other arm to support the cat's weight and drawing the cat close to your body in a kind and friendly manner to permit gentle restraint, not tight but enough to reduce wiggling. | 1 | |
| The student cradles the cat's abdomen with their other hand and removes the cat from the cage. | 2 | |
| With the cat's head still controlled, the student places the cat under one arm close to his or her body and closes the cage door with his or her free hand. | 1 | |
| The student places cat on table. | 1 | |
| The student selects a muzzle of appropriate size for the cat. | 5 | |
| The student places the cat in sitting or sternal position on exam table. | 1 | |
| The student positions the muzzle properly in his or her hands. | 3 | |
| The student approaches the cat from behind with the muzzle in both hands while another person restrains cat. | 3 | |
| The student brings the muzzle up to the cat's face in one swift motion. | 4 | |
| The student secures the muzzle behind the ears. | 3 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

APPLYING A LEAD WITH CHAIN ON A HORSE UNDER THE CHIN

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| Without quick movements and loud noises, the student properly approaches the haltered patient at a 45-degree angle to the patient's left shoulder. | 5 | |
| The student runs the snap through the lower metal ring on the left side of the halter from the outside in. | 4 | |
| The student carefully guides the chain under the horse's jaw. | 4 | |
| The student will run the snap through the lower metal ring on the opposite side of the halter. | 4 | |
| The student will continue up the cheekpiece of the halter and snap the lead onto the top ring of the halter. | 4 | |
| The student ensures the thumb tab is facing out on the snap. | 4 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Resource: <https://www.youngrider.com/how-to-safely-use-a-stud-chain/>



Handling and Restraining Practicum

APPLYING ELIZABETH COLLAR

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student chooses the correct size of E-collar for the patient. | 5 | |
| The student correctly prepares the E-Collar for placement. | 5 | |
| The student correctly places the E-Collar on the animal. | 5 | |
| Placement is adequately secured so the animal cannot remove the E-Collar. | 5 | |
| The E-Collar is secured such that the animal's breathing is not restricted. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

APPLYING A GAUZE DOG MUZZLE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student selects proper type of material and length. | 4 | |
| The student places the dog in sitting or sternal position on exam table or floor. | 1 | |
| The student makes a loop in the gauze and approaches the dog from behind. | 5 | |
| The student places the loop on the dog's face with the tie on top. | 5 | |
| The student quickly tightens the loop and then crosses the ends under the dog's face. | 5 | |
| The student brings the ends back behind the dog's head under the ears and ties in a quick-release bow. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

APPLYING A NYLON DOG MUZZLE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student selects appropriate muzzle. | 4 | |
| The student places the dog in sitting or sternal position on exam table or floor. | 2 | |
| The student comes from behind the dog's head with the muzzle in one hand in the correct position. | 5 | |
| The student brings the muzzle up to the dog's face and slips it on while grasping the strap with the other hand. | 5 | |
| The student secures the muzzle. | 4 | |
| The student checks for proper fit (one finger inserted under the strap). | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

HALTERING A HORSE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| Without quick movements and loud noises, the student properly approaches the patient at a 45-degree angle to the patient's left shoulder. | 4 | |
| The student places end of the lead rope over the horse's neck and passes sufficient length of lead to form a handheld loop around the horse's neck. | 4 | |
| Holding the handheld loop in his or her right hand, the student uses his or her left hand to slip the nose-band of the halter over the nose. | 4 | |
| Student releases the lead rope and with their right hand under the horse's neck, the student passes the crown strap over the head and behind the ears and attaches the end to the appropriate place on the halter. | 4 | |
| The student snaps the end of the lead to the lead ring of the halter and undrapes the lead rope from the horse's neck. | 4 | |
| The student adjusts the halter, so it is snug enough that the nose piece could not fall over the end of the nose but not so tight that the halter cuts or rubs the horse or restricts jaw movement or breathing. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

HALTERING RUMINANTS

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| Without quick movements and loud noises, the student properly approaches the patient at a 45-degree angle to the patient's left shoulder. | 5 | |
| The student places crown piece of halter over ears, then slips nose through nosepiece. | 5 | |
| The student properly adjusts the halter such that the nose band crosses over bridge of nose halfway between the nostrils and eyes. | 5 | |
| The student ensures that the adjustable portion of the nose band is under the chin, not across the bridge of the nose. | 5 | |
| The student keeps the standing end or lead rope portion on the left side of the patient. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

LIFTING A HIND FOOT OF A HORSE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| Without quick movements and loud noises, the student properly approaches the haltered patient at a 45-degree angle to the patient's hip. | 4 | |
| The student will stand beside the horse facing caudally (facing the hindquarters). | 4 | |
| The student will slide their hand over the hip and down the caudal aspect of the leg. | 4 | |
| The student will continue down the leg with their hand cupped around the palmar aspect, over the tendons behind the cannon bone. | 4 | |
| The student will apply light pressure to either side of the tendons near the fetlock until the horse lifts its leg. The student will then cup the hoof to support the animal. | 5 | |
| The student will gently place the foot back on the ground and move away in a safe manner. | 4 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Resource: <https://youtube.com/shorts/E6tp7FwA6tQ>

Handling and Restraining Practicum

PLACING A TAIL TIE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student lays the rope over the tail at the tip of the tail bone. | 5 | |
| The student folds all the tail hairs up over the rope. | 5 | |
| The student passes the short end of the rope behind the tail and makes a fold or bight in it. | 5 | |
| The student passes the fold or bight over the folded tail and under the rope, which is looped around the tail. | 5 | |
| The student pulls tight. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

REMOVING A FRIENDLY CAT FROM A CAGE AND WRAP IN A FEAR-REDUCED MANNER *UPDATED

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student places a thick, medium-sized towel sprayed with Feliway on the exam table. | 2 | |
| The student opens the cage door and calls the cat by name. | 1 | |
| The student presents a closed hand to the cat to allow it to sniff their hand, strokes the cat on the head and neck, slides hand under thorax to lift the fore quarters and gently draws the cat towards them while using the other arm to support the cat's weight and drawing the cat close to the body in a kind and friendly manner to permit gentle restraint, not tight but enough to reduce wiggling. | 2 | |
| The student cradles the cat's abdomen with their other hand and removes the cat from the cage. | 1 | |
| With the cat's head still controlled, the student places the cat under one arm close to his or her body and closes the cage door with his or her free hand. | 2 | |
| The student carries the cat to the exam table while holding the cat close to his or her body and places the cat onto the center of the towel, in sternal position. | 5 | |
| The student wraps the back corner of the towel over the rear of the cat | 3 | |
| The student takes one front corner of the towel and wraps it snugly over and around the cat's body, being sure to get the towel under the cat's neck. Wrap around the neck to ensure front feet are covered. | 3 | |
| The student repeats this action with the other end of the towel wrapping it around the cat and under its neck. | 3 | |
| Once both sides of the towel are wrapped around the cat the student tucks any excess towel under the cat. | 3 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

REMOVING DOG FROM FLOOR LEVEL CAGE TO RESTRAIN FOR LATERAL SAPHENOUS VENIPUNCTURE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| The student places a leash in one hand with a large loop open in the correct position (in the "P") and ready to place over the dog's head. | 1 | |
| While blocking the opening, the student opens the cage door enough to slip the hand holding the leash into the cage. | 1 | |
| The student slips the leash over the neck of the dog and gently tightens the leash around the neck. | 1 | |
| The student opens the door and allows the dog to exit the cage. | 1 | |
| The student lifts the dog and places on the table. | 1 | |
| The student places his or her right arm across the dog's neck and reaches between the front legs to grasp the dog's right forelimb in right hand. | 4 | |
| The student places left arm over the dog's back and reaches for the dog's right rear limb, just proximal to the hock. | 4 | |
| With the dog's body close, the student gently lifts the limbs while allowing the dog's body to lay on the table; the dog should be on its right side. | 4 | |
| The student allows the dog to relax for a couple seconds, not releasing the grasp on the limbs. | 3 | |
| The student uses left hand to hold the limb tightly in the area just distal to the stifle, which will occlude the vein. | 5 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

RESTRAINT OF A PIGLET

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| Student firmly grasps upper back leg, above the hock, of the piglet with one hand. | 5 | |
| Student places other hand under the belly of the piglet. | 4 | |
| Student lifts piglet to their chest. | 4 | |
| While holding the animal under its belly student wraps the other arm around d the neck of the animal. | 4 | |
| Student holds animal close to chest for maximum control of the animal. | 4 | |
| Student ensures animals has two points of contact on the floor before releasing the animal. | 4 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Reference: <https://www.securepork.org/Resources/Restraint.pdf>

Handling and Restraining Practicum

RESTRAINT OF A RABBIT

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| The student approaches the rabbit calmly and quietly. | 3 | |
| The student scruffs the rabbit with one hand while gently lifting the front end. | 5 | |
| The student's other hand immediately reaches under the hind limbs and holds them (not allowing the hind limbs to dangle). | 6 | |
| The student rests the rabbit's body on the arm with the hand holding the hind limbs. | 5 | |
| The scruffing hold is released, and the hand is moved to hold the rabbit's outside front leg. | 6 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

RESTRAINT OF THE CAT FOR CEPHALIC IV CATHETER PLACEMENT

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student places the cat in sternal recumbency on an examination table. | 3 | |
| The student controls and lifts the head up by placing thumb and forefingers over top of head, fingers firm on zygomatic arches (below eyes). | 6 | |
| The student extends the left front limb forward by grasping the elbow in the palm of his or her hand with thumb on the top of the elbow joint. | 6 | |
| The student allows the judge to grasp the left front paw and extend the limb toward him or her. | 4 | |
| The student occludes the vein by pressing down on the top of the elbow joint with his or her thumb and then rotating his or her thumb laterally. | 6 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

RESTRAINT OF THE CAT FOR JUGULAR VENIPUNCTURE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student places the cat in sternal recumbency with its chest close to the edge of the table. | 5 | |
| The student controls and lifts the head up by placing thumb and forefingers over top of head, fingers firm on zygomatic arches (below eyes). | 6 | |
| The student's other hand grasps the front legs and extends them down off the edge of the table. | 5 | |
| The student uses arm and elbow to restrain the cat's body close to the student's body. | 5 | |
| The student speaks to the patient in a calm and affectionate manner during the procedure. | 3 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

RESTRAINT OF THE CAT IN LATERAL RECUMBENCY FOR FEMORAL VENIPUNCTURE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student places the cat on an examination table. | 2 | |
| The student gains control of the cat's head by placing thumb on one side of the head by the jaw, the ring finger placed on the opposite side from behind the head, place pointer and middle finger on top of head and lifts it off the table enough to grasp both hind legs with his or her other hand and reaches under cat to grasp both hind limbs. | 7 | |
| The student lays the cat on its side with the hind legs stretched rearward. | 6 | |
| The student tucks top rear leg and tail while occluding with side of hand. | 7 | |
| The student speaks to the patient in a calm and affectionate manner during the procedure. | 3 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

RESTRAINT OF THE DOG FOR CEPHALIC VENIPUNCTURE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|---|-----------------|---------------|
| The student places a noose leash on the dog. | 1 | |
| The student restrains the dog in sternal recumbency. | 2 | |
| The student stands on the dog's right side, wrapping his or her right arm around the dog's neck. | 5 | |
| The student holds the dog's left forelimb with elbow in the palm of his or her hand and extend the limb forward toward the person performing the procedure. | 5 | |
| With the elbow of the dog in his or her palm, the student rotates his or her thumb up, so it is on top of the limb at the bend of the elbow. | 6 | |
| The student occludes the vessel with the thumb and rotates the thumb laterally. | 6 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

RESTRAINT OF THE SMALL DOG FOR JUGULAR VENIPUNCTURE

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student puts a noose leash on the dog and has the dog sit. | 1 | |
| The student places one arm around the dog's neck and places the other arm around the dog's back to grasp the forelimbs. | 5 | |
| The student pushes the dog's back with his or her body to encourage the dog to lie down. | 5 | |
| The student holds the head up under the jaw, away from the chest (can be achieved by cupping hand underneath the muzzle and by pushing the head upward). | 7 | |
| The student's other hand grasps the front legs and extends them over the end of the table. | 7 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |

Handling and Restraining Practicum

SNARE RESTRAINT OF THE PIG

Participant must talk through practicum steps with judge.

| Criteria | Points Possible | Points Earned |
|--|-----------------|---------------|
| The student, standing next to the patient, guides the loop of the snare into the mouth and over the nose or upper jaw. | 4 | |
| The student makes sure the loop is inserted far enough into the patient's mouth. | 5 | |
| The student pulls the loop tight when it is in the proper position. | 5 | |
| The student keeps the loop tight while moving to the front of the patient. | 5 | |
| The student maintains the pressure on the snare so that the patient cannot escape. | 5 | |
| The student keeps control of the patient until the patient ceases to struggle. | 4 | |
| The student releases the patient after the procedure is completed. | 2 | |
| Communicative ability, professionalism, articulation and customer relations. | 5 | |
| TOTAL POINTS | 30 | |



HORTICULTURE

CDE# 105482

Incorrect Mark Correct Mark

✓ X ● ○

Team Name _____

This sheet is for demonstration and practice only. You must use a real scan sheet for actual competition.

| Team Number | State | Last Name | First Name |
|-------------|---------|-----------------------------|-----------------------------|
| 0 0 0 0 | ○ ○ ○ ○ | ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ | ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ |
| 1 1 1 1 | A A A A | A A A A A A A A A A A A A A | A A A A A A A A A A A A A A |
| 2 2 2 2 | B B B B | B B B B B B B B B B B B B B | B B B B B B B B B B B B B B |
| 3 3 3 3 | C C C C | C C C C C C C C C C C C C C | C C C C C C C C C C C C C C |
| 4 4 4 4 | D D D D | D D D D D D D D D D D D D D | D D D D D D D D D D D D D D |
| 5 5 5 5 | E E E E | E E E E E E E E E E E E E E | E E E E E E E E E E E E E E |
| 6 6 6 6 | F F F F | F F F F F F F F F F F F F F | F F F F F F F F F F F F F F |
| 7 7 7 7 | G G G G | G G G G G G G G G G G G G G | G G G G G G G G G G G G G G |
| 8 8 8 8 | H H H H | H H H H H H H H H H H H H H | H H H H H H H H H H H H H H |
| 9 9 9 9 | I I I I | I I I I I I I I I I I I I I | I I I I I I I I I I I I I I |
| | J J J J | J J J J J J J J J J J J J J | J J J J J J J J J J J J J J |
| | K K K K | K K K K K K K K K K K K K K | K K K K K K K K K K K K K K |
| | L L L L | L L L L L L L L L L L L L L | L L L L L L L L L L L L L L |
| | M M M M | M M M M M M M M M M M M M M | M M M M M M M M M M M M M M |
| | N N N N | N N N N N N N N N N N N N N | N N N N N N N N N N N N N N |
| | O O O O | O O O O O O O O O O O O O O | O O O O O O O O O O O O O O |
| | P P P P | P P P P P P P P P P P P P P | P P P P P P P P P P P P P P |
| | Q Q Q Q | Q Q Q Q Q Q Q Q Q Q Q Q Q Q | Q Q Q Q Q Q Q Q Q Q Q Q Q Q |
| | R R R R | R R R R R R R R R R R R R R | R R R R R R R R R R R R R R |
| | S S S S | S S S S S S S S S S S S S S | S S S S S S S S S S S S S S |
| | T T T T | T T T T T T T T T T T T T T | T T T T T T T T T T T T T T |
| | U U U U | U U U U U U U U U U U U U U | U U U U U U U U U U U U U U |
| | V V V V | V V V V V V V V V V V V V V | V V V V V V V V V V V V V V |
| | W W W W | W W W W W W W W W W W W W W | W W W W W W W W W W W W W W |
| | X X X X | X X X X X X X X X X X X X X | X X X X X X X X X X X X X X |
| | Y Y Y Y | Y Y Y Y Y Y Y Y Y Y Y Y Y Y | Y Y Y Y Y Y Y Y Y Y Y Y Y Y |
| | Z Z Z Z | Z Z Z Z Z Z Z Z Z Z Z Z Z Z | Z Z Z Z Z Z Z Z Z Z Z Z Z Z |

Code

| |
|-----|
| 0 0 |
| 1 1 |
| 2 2 |
| 3 3 |
| 4 4 |
| 5 5 |
| 6 6 |
| 7 7 |
| 8 8 |
| 9 9 |

| Place | Class | Placing Classes | | | | | | | | | Place | |
|-------|-------|-----------------|---|---|---|---|---|---|---|---|-------|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | |
| 1 | 1234 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 1234 | 1 |
| 2 | 1243 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 1243 | 2 |
| 3 | 1324 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 1324 | 3 |
| 4 | 1342 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 1342 | 4 |
| 5 | 1423 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 1423 | 5 |
| 6 | 1432 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 1432 | 6 |
| 7 | 2134 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 2134 | 7 |
| 8 | 2143 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 2143 | 8 |
| 9 | 2314 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 2314 | 9 |
| 10 | 2341 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 2341 | 10 |
| 11 | 2413 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 2413 | 11 |
| 12 | 2431 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 2431 | 12 |
| 13 | 3124 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 3124 | 13 |
| 14 | 3142 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 3142 | 14 |
| 15 | 3214 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 3214 | 15 |
| 16 | 3241 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 3241 | 16 |
| 17 | 3412 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 3412 | 17 |
| 18 | 3421 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 3421 | 18 |
| 19 | 4123 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 4123 | 19 |
| 20 | 4132 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 4132 | 20 |
| 21 | 4213 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 4213 | 21 |
| 22 | 4231 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 4231 | 22 |
| 23 | 4312 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 4312 | 23 |
| 24 | 4321 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 4321 | 24 |

| Team | Ind. |
|---------|---------|
| 0 0 0 0 | 0 0 0 0 |
| 1 1 1 1 | 1 1 1 1 |
| 2 2 2 2 | 2 2 2 2 |
| 3 3 3 3 | 3 3 3 3 |
| 4 4 4 4 | 4 4 4 4 |
| 5 5 5 5 | 5 5 5 5 |
| 6 6 6 6 | 6 6 6 6 |
| 7 7 7 7 | 7 7 7 7 |
| 8 8 8 8 | 8 8 8 8 |
| 9 9 9 9 | 9 9 9 9 |

| Practicums (Judges) | | | | | |
|---------------------|---------|---------|---------|---------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 | 0 0 0 0 |
| 1 1 1 1 | 1 1 1 1 | 1 1 1 1 | 1 1 1 1 | 1 1 1 1 | 1 1 1 1 |
| 2 2 2 2 | 2 2 2 2 | 2 2 2 2 | 2 2 2 2 | 2 2 2 2 | 2 2 2 2 |
| 3 3 3 3 | 3 3 3 3 | 3 3 3 3 | 3 3 3 3 | 3 3 3 3 | 3 3 3 3 |
| 4 4 4 4 | 4 4 4 4 | 4 4 4 4 | 4 4 4 4 | 4 4 4 4 | 4 4 4 4 |
| 5 5 5 5 | 5 5 5 5 | 5 5 5 5 | 5 5 5 5 | 5 5 5 5 | 5 5 5 5 |
| 6 6 6 6 | 6 6 6 6 | 6 6 6 6 | 6 6 6 6 | 6 6 6 6 | 6 6 6 6 |
| 7 7 7 7 | 7 7 7 7 | 7 7 7 7 | 7 7 7 7 | 7 7 7 7 | 7 7 7 7 |
| 8 8 8 8 | 8 8 8 8 | 8 8 8 8 | 8 8 8 8 | 8 8 8 8 | 8 8 8 8 |
| 9 9 9 9 | 9 9 9 9 | 9 9 9 9 | 9 9 9 9 | 9 9 9 9 | 9 9 9 9 |

| Exam | |
|------------|------------|
| 1 A B C D | 26 A B C D |
| 2 A B C D | 27 A B C D |
| 3 A B C D | 28 A B C D |
| 4 A B C D | 29 A B C D |
| 5 A B C D | 30 A B C D |
| 6 A B C D | 31 A B C D |
| 7 A B C D | 32 A B C D |
| 8 A B C D | 33 A B C D |
| 9 A B C D | 34 A B C D |
| 10 A B C D | 35 A B C D |
| 11 A B C D | 36 A B C D |
| 12 A B C D | 37 A B C D |
| 13 A B C D | 38 A B C D |
| 14 A B C D | 39 A B C D |
| 15 A B C D | 40 A B C D |
| 16 A B C D | 41 A B C D |
| 17 A B C D | 42 A B C D |
| 18 A B C D | 43 A B C D |
| 19 A B C D | 44 A B C D |
| 20 A B C D | 45 A B C D |
| 21 A B C D | 46 A B C D |
| 22 A B C D | 47 A B C D |
| 23 A B C D | 48 A B C D |
| 24 A B C D | 49 A B C D |
| 25 A B C D | 50 A B C D |

| Exam 2/Team |
|-------------|
| 1 A B C D |
| 2 A B C D |
| 3 A B C D |
| 4 A B C D |
| 5 A B C D |
| 6 A B C D |
| 7 A B C D |
| 8 A B C D |
| 9 A B C D |
| 10 A B C D |
| 11 A B C D |
| 12 A B C D |
| 13 A B C D |
| 14 A B C D |
| 15 A B C D |
| 16 A B C D |
| 17 A B C D |
| 18 A B C D |
| 19 A B C D |
| 20 A B C D |
| 21 A B C D |
| 22 A B C D |
| 23 A B C D |
| 24 A B C D |
| 25 A B C D |

| Assessment and Solution | | | | | | | | | |
|-------------------------|------------|------------|------------|------------|--|--|--|--|--|
| 1 A B C D | 6 A B C D | 11 A B C D | 16 A B C D | 21 A B C D | | | | | |
| 2 A B C D | 7 A B C D | 12 A B C D | 17 A B C D | 22 A B C D | | | | | |
| 3 A B C D | 8 A B C D | 13 A B C D | 18 A B C D | 23 A B C D | | | | | |
| 4 A B C D | 9 A B C D | 14 A B C D | 19 A B C D | 24 A B C D | | | | | |
| 5 A B C D | 10 A B C D | 15 A B C D | 20 A B C D | 25 A B C D | | | | | |

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | | | |
|--------------------------|------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|
| Number of Specimen | Identification A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 25 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | | | | | |
| Number of Specimen | Identification B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 25 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | | | | | |
| Number of Specimen | Identification C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 25 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | | | | | |
| Number of Specimen | Identification D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 25 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | | | | | |