

VETERINARY SCIENCE

Revised 6/2015

Purpose and Standards

The Veterinary Science event seeks to effectively prepare the students for the expectations of the animal health care and services (Veterinary Hospitals/Clinics, Grooming Facilities, Pet Stores, Kennels/Boarding Facilities, and Feed Stores) workplace. Workers seeking careers in the animal health care field must develop a high degree of knowledge, skill and ability to solve difficult problems. This event blends the testing of skills and knowledge required for careers in the animal science career pathway. California Career Technical Education Model Curriculum Standards addressed by this event include:

Foundation Standards: Listening and Speaking 1.1, 2.2c, 2.2f, 1.8, Technology 4.2, 4.6, Health and Safety 6.2, 6.5, Ethics and Legal Responsibilities 8.3, Leadership and Teamwork 9.1, 9.2, 9.3.

Animal Science Pathways: D1.3, D1.4, D3.1, D3.2, D4.1, D5.1, D6.1-D6.5, D9.1, D9.4, D10.1, D10.2, D11.1-D11.3.

Contestants

The contest team will be made up of four members. Each member will compete in all events individually. The three high individuals will make up the team score.

To be eligible to compete at the state finals contest, a team must compete in a minimum of three of the following field days: CSU Chico, Arbuckle, UC Davis, Modesto JC, Reedley CC, CSU Fresno, Lassen CC, CSU Pomona/Mt. San Antonio CC, San Diego Section Field Day, or Dinuba. Only the top 24 teams, determined mathematically by a tabulations coordinator, will be eligible to compete at the state finals contest. The formula to calculate the 24 qualifying teams will be:

$$\text{Weighted Score} = (51 - \text{Ranking}) + (\# \text{ of teams} - \text{Rank})/5$$

Classes

The contest will include:

	Class	Individual Points	Team Points
A.	Identification Tests		
	1. Equipment and Materials	150	450
	2. Parasites	50	150
	3. Breed identification	100	300
B.	Practicum #1	50	150
	Practicum #2	50	150
	Practicum #3	50	150
C.	General Knowledge Test (50 questions)	100	300
	TOTAL POINTS	550	1,650

Tie Breaker

1. Individual or team ties will be broken with highest General Knowledge test score.
2. If there still is a tie, it will be broken with highest Breed I.D. test score.
3. Individual or team ties will be broken with highest practicum score.

Sub-contest Awards

Sub-contest awards will be given for high teams and individuals in the following areas: Identification, Practicums, and Knowledge Test.

Rules

- I. Contestants in this contest will be divided into groups. Only one group will be allowed at one site at one time. Only one member of a team shall be allowed in a group.
- II. All equipment and practicum materials needed by the contestants will be available at the judging sites.
- III. All contestants must fill out the official score sheets and will be graded according to the points shown on the score card.
- IV. The contestants will be allowed 45 minutes at each test site to complete that section.
Equipment/Materials, Parasites/Breed Identification, General Knowledge Test – three rotations.
- V. Three Practicums will be allowed 90 minutes for completion.
- VI. Identification Test (Time: Equipment/Materials = 45 minutes, Breed/Parasites = 45 minutes)
PowerPoint slides will be set at 15 seconds per picture, the PowerPoint will be ran through twice and the slides will be numbered.
 - A. Equipment and Materials can be picked at random from the approved list. Seventy-five items will be chosen for this contest. Two points for each correct answer.
 - B. Parasites are to be picked from the list provided. The specie and location on the animal will be given. Twenty-five items will be used in the contest. Two points for each correct answer.
 - C. Students will identify 50 animals from the approved list. Each correct answer will be worth two points.
- VII. Practicums (Time: 90 minutes)
Practicums will consist of three from the list of current year practicums: Students will go in order from one practicum to the other until all contestants are finished in each group. The list of practicums will come from the list provided by the National FFA contest for Veterinary Science. The National Rubric will be used. The score will be doubled to make each practicum worth 50 points. There will be a three minute maximum time limit for each of the individual practicums.

Practicum List Examples:

2017-2018 Practicum

Carrying a Cat

Restraint of the Cat for the femoral Venipuncture

Removing a dog from a floor level cage or kennel

Restraint of the dog in Sternal Recumbency

Restraint of a rabbit

Haltering cattle

2017-2018 Practicum (continued)

Filling a syringe

Tying a bowline knot

Administrating Aural medication

Bandage removal
Tying a reefer knot

2018-2019 Practicum

Using a Cat Bag
Restraint of the cat for Jugular Venipuncture
Use a microscope
Open a gown and gloves
Applying a gauze dog muzzle
Restraint of a small dog in lateral recumbency
Haltering a Horse
Tying a half hitch
Administering Ophthalmic medication
Fecal flotation with fecalzer
Cat Stretch- restraint of the cat lateral recumbency

2015-2016 Practicum

Removing a cat from a cage
Applying a cat muzzle
Restraint of the dog for Venipuncture of Lateral Saphenous vein
Tying a double half hitch knot
Tying a square Knot
Administering topical wound treatment
Administering an Intramuscular injection
Prepare a Gram- Stained slide
Opening a surgery pack
Prescription filling
Administering topical parasiticide

2016-2017 Practicum

Placing a tail tie
Bandage Application
Building an temporary rope halter for a cow
Restraint of a dog for Jugular venipuncture
Restraint of a dog for Cephalic Venipuncture
Applying a commercial dog muzzle
Surgical Preparation
Removal of sutures
Administering a subcutaneous injection
Preparing a surgical pack for sterilization
Collect a sample of dermatophyte culture and Inoculate Dermatophyte culture
Restraint of the cat for Cephalic IV Catheter placement

VIII. General Knowledge Test (Time: 45 minutes)

- A. The written exam will consist of 50 multiple choice questions from a set of approved texts, of no more than five, that will be selected by a committee made up of the top five coaches at State Finals of the revision year to be decided by the end of CATA Summer Conference.

- Veterinary Assisting: Fundamental and Applications.* Vanhorn, Clark. ISBN:978-1-4354-5387-6
- B. Test will be generated in scantron form including multiple choice, true/false and/or matching.
 - C. The test will be 50 questions in length with each question being worth 2 points each.
 - D. Students are allowed to have basic (non-programming) calculators for the test to the General Knowledge Test section.

Equipment and Materials Identification List

Ambubag	Ear tag (metal) pliers
Anesthetic machines	Elastrator
Animal clippers	Elizabethian collar
Autoclave	Emasculators
Autoclave tape indicator	Endotracheal tubes
Backhaus towel clamps	Fecal loop
Balling gun	Fecalyzers
Bands (castration or docking)	Fetal extractor
Bandaging material- Elasticon	Fingertip toothbrush
Bandaging material– roll gauze	Forceps - Alligator
Bandaging material– vet wrap	Forceps- Allis tissue
Betadine	Forceps- Babcock tissue
Brush - Body (soft bristle)	Forceps- Brown-Adson thumb
Brush - Dandy (stiff bristle)	Forceps- Crile
Brush - Slicker	Forceps- Halstead mosquito hemostatic
Brush - Pin	Forceps- Kelly
Bulb syringe	Forceps - Rat tooth thumb
Cat bag	Gag mouth speculum (small)
Carmalt	Gag mouth speculum (large)
Catch pole (dog snare)	Gavage needle
Catheter - IV	Gravity feeder / J tube
Catheter - butterfly	Halter
Catheter - urine	Head chute
Centrifuge	Hog snare
Chain twitch	Hoof knife
Chemical indicator strips	Hoof nippers
Clipper blades	Hoof pick
Clipper comb	Hoof rasp
Surgical drapes	Hoof trimmers
Cold sterile tray	Humane twitch
Comb - Curry	Identification tag applicator
Comb - Flea	IV fluids
Comb - Scotch	IV administration
Cover slips	Laryngoscopes
Dehorner - Barnes	Lead rope
Dehorner - electric	Lead shank
Dehorner - scoop or tube	Needle holder – Mayo-Hegar
Dental floats	Needle holder – Olsen-Hegar
Dental retractor	Microscope slides
Dental scaler	Muzzle - basket
Disposable hypodermic needles	Muzzle – commercial
Drench gun	Nail clippers - guillotine
Ear notcher	Nail clippers - plier
Ear tags	Obstetrical chain and handle

Equipment and Materials Identification List - continued

Ophthalmoscope	Staple remover
Otoscope	Steel lift table
Paste gun	Stethoscope
Pig tooth nippers	Surgical cap
Pill counting tray	Surgical gloves
Radiology personal protective equipment	Surgical gown
Rumen magnet	Surgical masks
Scalpel blade	Surgical tray
Scalpel handle	Suture materials
Scissors – Bandage	Suture needle
Scissors – Lister bandage	Suture wire cutting scissors
Scissors – Littauer suture removal	Syringe - leur lock
Scissors – Mayo dissecting	Syringe - slip tip
Scissors – Metzenbaum dissecting	Syringe - automatic, multi-dose
Shedding blade	Tattooing instruments - small & large
Silver nitrate sticks	Tourniquet
Small animal oxygen cage	Trocar & cannula
Snook ovariohysterectomy hook	Weight tape
Squeeze chute	

Parasite Identification List

Blowfly (Family *Calliphoridae*)
 Blowfly Maggot (Family *Calliphoridae*)
 Cat Warble (Genus *Cuterebra*)
 Cattle Grub (Genus *Hypoderma*)
 Coccidia (Genus *Isospora* or *Eimeria*)
 Demodectic Mite (Genus *Demodex*)
 Ear Mite (Family *Ascaridae*; Genus *Otodectes*)
 Fleas* (Genus *Ctenocephalides*)
 Flea Larva (Genus *Ctenocephalides*)
 Flea Tapeworm (Genus *Dipylidium*)
 Flea Tapeworm Egg (Genus *Dipylidium*)
 Flea Tapeworm Segment (Genus *Dipylidium*)
 Giardia (Genus *Giardia*)
 Hard Tick (Family *Ixodidae*; Genus *Amblyomma* or *Dermacentor*)
 Heartworm Adult* (Genus *Dirofilaria*)
 Heartworm *Microfilaria** (Genus *Dirofilaria*)
 Hookworm Adult* (Family *Ancylostomatidae*; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
 Hookworm Egg* (Family *Ancylostomatidae*; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
 Horse Bots* (Genus *Gasterophilus*)
 Horse Strongyles* (Family *Strongylidae*; Genus *Strongylus*)
 Lice - Biting (Order *Mallophaga*; Genus *Bovicola* or *Trichodectes*)
 Lice - Sucking (Order *Anoplura*; Genus *Linognathus* or *Hematopinus*)
 Liver Fluke (Class *Trematoda*; Genus *Fasciola*, *Fascioloides* or *Dicrocoelium*)
 Lungworm (Family *Metastrongylidae*; Genus *Metastrongylus*, *Dictyocaulus* or *Aelurostrongylus*)
 Mosquito Adult (Family *Culicidae*; Genus *Anopheles*, *Culex* or *Aedes*)
 Mosquito Larva (Family *Culicidae*; Genus *Anopheles*, *Culex* or *Aedes*)
 Pinworm (Genus *Oxyuris*)
 Roundworm Adult* (Family *Ascarididae* or *Toxocaridae*; Genus *Toxocara*, *Toxascaris*, *Ascaris*, *Parascaris* or *Neoascaris*)
 Roundworm Egg* (Family *Ascarididae* or *Toxocaridae*; Genus *Toxocara*, *Toxascaris*, *Ascaris*, *Parascaris* or *Neoascaris*)
 Sarcoptic Mite (Family *Ascaridae*; Genus *Sarcoptes* or *Notoedres*)
 Taenia Tapeworm* (Family *Taeniidae*; Genus *Taenia*)
 Taenia Tapeworm Egg* (Family *Taeniidae*; Genus *Taenia*)
 Taenia Tapeworm Segment* (Family *Taeniidae*; Genus *Taenia*)
 Whipworm* (Genus *Trichuris*)
 Whipworm Egg* (Genus *Trichuris*)
 *Asterisk indicates which parasite life cycles could have questions.

Breed Identification List

Dogs

Sporting Group

Brittany
Cocker Spaniel
English Setter
English Springer Spaniel
German Shorthaired Pointer
Golden Retriever
Irish Setter
Labrador Retriever
Weimaraner

Non-Sporting Group

Bichon Frise
Boston Terrier
Bulldog
Chinese Shar-Pei
Chow Chow
Dalmatian
Lhasa Apso
Poodle

Terrier Group

Bull Terrier
Cairn Terrier
Miniature Schnauzer
Parson Russell Terrier
Scottish Terrier
Smooth Fox Terrier
West Highland White Terrier
Wire Fox Terrier

Small Mammals

Chinchilla
Degus
Ferret
Gerbils
Guinea Pig
Hamster
Hedgehog
Sugar Glider

Herding Group

Australian Cattle Dog
Australian Shepherd
Border Collie
Cardigan Welsh Corgi
Collie
German Shepherd Dog
Old English Sheepdog
Pembroke Welsh Corgi
Shetland Sheepdog

Working Group

Akita
Alaskan Malamute
Bernese Mountain Dog
Boxer
Bullmastiff
Doberman Pinscher
Giant Schnauzer
Great Dane
Great Pyrenees
Mastiff
Newfoundland
Portuguese Water Dog
Rottweiler
Saint Bernard
Samoyed
Siberian Husky
Standard Schnauzer

Birds

Cockatiel
Cockatoos
Love Birds
Parakeet
African Gray Parrot
Canary
Macaw
Mynah
Rainbow Lorikeet
Society Finch
Sun Conure

Toy Group

Cavalier King Charles Spaniel
Chihuahua
Italian Greyhound
Maltese
Miniature Pinscher
Papillon
Pekingese
Pomeranian
Poodle
Pug
Shih Tzu
Silky Terrier
Toy Fox Terrier
Yorkshire Terrier

Hound Group

Afghan Hound
American Foxhound
Basenji
Basset Hound
Beagle
Black and Tan Coonhound
Bloodhound
Dachshund
English Foxhound
Greyhound
Whippet

Reptiles

Chameleon
Gecko
Iguana
Bearded Dragon
Snake
Turtle
Frog
Toad

Zebra Finch

Breed Identification List - continued**Cats**

Abyssinian
 American Shorthair
 Burmese
 Cornish Rex
 Devon Rex
 Exotic
 Maine Coon
 Manx
 Persian
 Ragdoll
 Russian Blue
 Siamese
 Sphynx
 Turkish Angora

Rabbits

American Fuzzy Lop
 Angora
 Californian
 Dutch
 Dwarf Hotot
 English Spot
 Flemish Giant
 Jersey Wooly
 Holland Lop
 Netherland Dwarf
 New Zealand
 Polish
 Mini-Rex
 Satin

Dairy Cattle

Ayrshire (1200-1400 lbs)
 Brown Swiss
 Guernsey
 Holstein (Approx. 1500 lbs)
 Jersey

Poultry

Chicken-Cornish
 Chicken-Leghorns
 Chicken- Rhode Island Red
 Chicken-Plymouth Rock
 Duck
 Geese
 Quail
 Turkey

Dairy Cattle

Ayrshire
 Brown Swiss
 Guernsey
 Holstein
 Jersey

Beef Cattle

Angus
 Brahman
 Charolais
 Hereford
 Simmental
 Shorthorn

Swine

American Landrace
 Berkshire
 Chester White
 Duroc
 Hampshire
 Yorkshire

Sheep

Cheviot
 Columbia
 Dorset
 Hampshire
 Jacob
 Merino
 Montendale
 Rambouillet
 Southdown
 Suffolk

Other

Potbellied Pig

Horse

Appaloosa
 Arabian
 Belgian
 Clydesdale
 Haflinger
 Miniature
 Morgan
 Paint
 Paso Fino
 Percheron
 Quarter Horse
 Saddlebred
 Standardbred (w/cart)
 Tennessee Walking Horse
 Thoroughbred
 Donkey
 Mule

Goat

Alpine
 Nubian
 Angora
 Boer
 LaMancha
 Oberhasli
 Pygmy
 Saanen
 Toggenburg

Rubrics

Official Rubrics for each practicum can be found at the National FFA website:
<https://www.ffa.org/Programs/Awards/CDE/Pages/Veterinary-Science.aspx>

EXAMPLE RUBRIC

Veterinary Science
 Handling and Restraining Practicum

Carrying a Cat

Participant Name: _____ State: _____

Participant must talk through practicum steps with judge.

Criteria	Points Possible	Points Earned
1. The student ensures that the cat is calm and happy.	6	
2. The student places one hand on the front of the cat’s body to control the head and front limbs.	7	
3. The student places his/her other hand under the abdomen and rump to control the rear limbs.	6	
4. The student pulls the cat close to their body for support.	6	
TOTAL POINTS	25	
Total Points x 2 = Final Score	50	

 Signature

 Date Judge’s