

Middle School Veterinary Science CDE

(rev. Nov. 2018)

Purpose

The purpose of the veterinary science career development event is to promote college and career readiness by providing opportunities to develop knowledge and demonstrate practical skills in the field of veterinary science.

Eligibility

This event is open to all middle school FFA chapters and FFA members in good standing. Members that have participated in a previous national event or previous state winning teams in this area are ineligible.

This event will be held during the June CDE Week.

Event Procedures

- The event will be a team event consisting of four students. All four scores will count towards the team total.
- It is required that participants be in official dress. Members must provide their own clipboard, pencil, non-programmable calculator. If any other items that will be required for practicums that need to be provided for sanitation reasons will be announced at least a month in advance.
- Any participant in possession of any electronic device in the preparation room or in the CDE event area is subject to disqualification.

Event Format

A. Team Event- Written Test (100 points) 30 minutes

The test will consist of 50 multiple choice questions (2pts each) designed to determine the member's broad understanding of the veterinary science field. Each question is worth two points. This year questions will come from the last three years of the National FFA Veterinary Science CDE exam. Topics for the exam may include: Behavior, Disease, Medical Terminology, Medical Records, Anatomy/Physiology, Regulations, Patient Management, Facility Management, Genetics, Nutrition and Husbandry.

B. Team Portion- Math Applications Practicum – 100 points

The number of practicum questions will vary based on the type of activity that is assigned. Participants will have 30 minutes to complete the entire math application practicum. Questions may include conversions, dose calculations, dilutions, cost calculations and invoices. There will be 10 questions for 10 points each. The conversion sheet will NOT be provided at the state or national level.

Example: Sophie, a golden retriever, and her owner have just moved from out-of-state and are reestablishing veterinarian relations at your clinic. Sophie's owner has provided you with her health records from their previous veterinarian. Sophie had been prescribed a diet plan by the previous veterinarian and had been coming into the clinic for weekly weight checks. Sophie's owner would like to continue the weekly checks with you. You weigh Sophie and record her weight as 19 kg. The owner would like you to tell her how much weight Sophie has lost. Sophie's last recorded weight was 43.2 lb. How many pounds did Sophie lose since the last weighing?

ANSWER: Sophie has lost 1.4 lb. since the last recorded weighing.

C. Identification (50 points) 30 minutes

The identification portion will consist of parasites, animal breeds and species. There will be 15 parasites and 10 breeds (two points each). The parasites, breeds and equipment will come from the National FFA list. Parasites, Breeds may be high quality pictures, real/preserved parasites and animals.

Scoring

Class/Practicum	Individual Pts	Team Pts
Identification (2 pts each)	50	200
Team Activity-Written Exam (2 pts each)	N/A	100
Team Activity- Math Application Practicum (10 pts each)	N/A	100
Maximum Total Points	50	400

Tiebreakers

- Team tiebreakers will be settled in the following order:
 - Combined individual identification total score
 - Combined Math Practicum Score
- Individuals tiebreakers will be settled in the following order:
 - Identification total score
 - Written exam score

Awards

Awards will be presented to individuals and teams based upon their rankings at the State Fair Breakfast.

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.

Written Exam:

Small Animal Care and Management. Warren. ISBN: 978-1-4180-4105-2

An Illustrated Guide to Veterinary Medical Terminology. Romich. ISBN: 978-1-4354-2012-0

Identification:

Veterinary Instruments and Equipment: A Pocket Guide. Sonsthagen. ISBN: 978-0323032032

<http://loudoun.nvcc.edu/vetonline/vet121/instruments.htm>

<https://www.spectrumsurgical.com/product/10-0227/Surgical-Instrument-Flash-Cards.php>

American Kennel Club – <http://www.akc.org/index.cfm>

Cat Fanciers' Association – <http://www.cfa.org/client/breeds.aspx>

American Rabbit Breeders Association – <http://www.arba.net/>

Math Practicum:

Medical Mathematics and Dosage Calculations for Veterinary Professionals. Bill, Robert. ISBN: 978-08138263

Parasite Identification

200. Blowfly (Family Calliphoridae)
201. Calcium oxalate crystals
202. Cat Warble (Genus Cuterebra)
203. Cocci (bacteria)
204. Coccidia (Genus Isospora or Eimeria)
205. Demodectic Mite (Genus Demodex)
206. Ear Mite (Family Psoroptidae ; Genus Otodectes)
207. Eosinophils
208. Epithelial cells (urine)
209. Flea Larva (Genus Ctenocephalides)
210. Flea Tapeworm Egg* (Genus Dipylidium)
211. Flea Tapeworm Segment* (Genus Dipylidium)
212. Flea Tapeworm* (Genus Dipylidium)
213. Fleas* (Genus Ctenocephalides)
214. Giardia* (Genus Giardia)
215. Heartworm Adult* (Genus Dirofilaria)
216. Heartworm Microfilaria* (Genus Dirofilaria)
217. Hookworm Adult* (Family Ancylostomatidae; Genus
Ancylostoma, Uncinaria, Bunostomum or Globocephalus)
218. Hookworm Egg* (Family Ancylostomatidae; Genus
Ancylostoma, Uncinaria, Bunostomum or Globocephalus)
219. Horse Bots* (Genus Gasterophilus)
220. Horse Strongyles* (Family Strongylidae; Genus Strongylus)
221. Lice — Biting (Order Mallophaga; Genus Bovicola or
Trichodectes)
222. Lice — Sucking (Order Anoplura; Genus Linognathus or
Hematopinus)
223. Liver Fluke (Class Trematoda; Genus Fasciola, Fascioloides or Dicrocoelium)
224. Mosquito Adult (Family Culicidae; Genus Anopheles,
Culex or Aedes)
225. Mosquito Larva (Family Culicidae; Genus Anopheles,
Culex or Aedes)
226. Neutrophils
227. Platelets
228. Red blood cell (erythrocyte)
229. Rod (bacteria)
230. Roundworm Adult* (Family Ascarididae or Toxocaridae;
Genus Toxocara, Toxascaris, Ascaris, Parascaris or
Neoascaris)
231. Roundworm Egg* (Family Ascarididae or Toxocaridae;
Genus Toxocara, Toxascaris, Ascaris, Parascaris or
Neoascaris)
232. Sarcoptic Mite (Family Sarcoptidae ; Genus Sarcoptes or
Notoedres)
233. Struvite crystals (triple magnesium phosphate)
234. Taenia Tapeworm Egg* (Family Taeniidae; Genus Taenia)
235. Taenia Tapeworm Segment* (Family Taeniidae; Genus
Taenia)
236. Taenia Tapeworm* (Family Taeniidae; Genus Taenia)
237. Tick — American Dog (Family Dermacentor; Genus
variabilis)
238. Tick — Black Legged Deer (Family Ixodes; Genus
scapularis)
239. Tick — Brown Dog (Family Rhipicephalus; Genus
sanguineus)
240. Tick — Lonestar (Family Amblyomma; Genus
americanum)
241. Whipworm Egg* (Genus Trichuris)
242. Whipworm* (Genus Trichuris)
243. Yeast (cytology)

*Asterisk indicates which parasite life cycles could have

Breed/Species Identification List - Canine**HERDING GROUP**

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

HOUND GROUP

- 308. Afghan Hound
- 309. Basenji
- 310. Basset Hound
- 311. Beagle
- 312. Black and Tan Coonhound
- 313. Bloodhound
- 314. Dachshund
- 315. Greyhound
- 316. Rhodesian Ridgeback

NON-SPORTING GROUP

- 317. Bichon Frise
- 318. Boston Terrier
- 319. Bulldog
- 320. Chinese Shar-Pei
- 321. Chow Chow
- 322. Dalmatian
- 323. Poodle

SPORTING GROUP

- 324. Brittany
- 325. Cocker Spaniel
- 326. English Setter
- 327. German Shorthaired Pointer
- 328. Golden Retriever
- 329. Irish Setter
- 330. Labrador Retriever
- 331. Weimaraner

TERRIER GROUP

- 332. Bull Terrier
- 333. Cairn Terrier
- 334. Parson Russell Terrier
- 335. Scottish Terrier
- 336. West Highland White Terrier

TOY GROUP

- 337. Cavalier King Charles Spaniel
- 338. Chihuahua
- 339.. Miniature Pinscher
- 340. Papillon
- 341. Pekingese
- 342. Pomeranian
- 343. Poodle
- 344. Pug
- 345. Shih Tzu
- 346. Yorkshire Terrier

WORKING GROUP

- 347. Bernese Mountain Dog
- 348. Boxer
- 349. Doberman Pinscher
- 350. Great Dane

- 351. Great Pyrenees
- 352. Mastiff
- 353. Newfoundland
- 354. Portuguese Water Dog
- 355. Rottweiler
- 356. Saint Bernard
- 357. Siberian Husky
- 358. Standard Schnauzer

Cats

- 359. Abyssinian
- 360. American Shorthair
- 361. Burmese
- 362. Maine Coon
- 363. Manx
- 364. Persian
- 365. Ragdoll
- 366. Russian Blue
- 367. Siamese
- 368. Sphynx

Birds

- 369. African Gray Parrot
- 370. Canary
- 371. Cockatiel
- 372. Cockatoos
- 373. Love Birds
- 374. Macaw
- 375. Parakeet
- 376. Sun Conure
- 377. Zebra Finch

Breed/Species Identification List - Multi-Species**Reptiles**

- 378. Bearded Dragon
- 379. Chameleon
- 380. Gecko
- 381. Iguana

Poultry

- 382. Chicken- Cornish
- 383. Chicken- Leghorns
- 384. Chicken- Plymouth Rock
- 385. Chicken- Rhode Island Red
- 386. Duck
- 387. Geese
- 388. Quail
- 389. Turkey

Small Mammals

- 390. Chinchilla
- 391. Ferret
- 392. Gerbils
- 393. Guinea Pig
- 394. Hamster
- 395. Hedgehog
- 396. Sugar Glider

Rabbits

- 397. Angora
- 398. Californian
- 399. Dutch
- 400. English Spot
- 401. Holland Lop
- 402. Mini-Rex
- 403. Netherland Dwarf
- 404. New Zealand

Dairy Cattle

- 405. Ayrshire
- 406. Brown Swiss
- 407. Guernsey
- 408. Holstein
- 409. Jersey

Beef Cattle

- 410 Angus
- 411. Brahman
- 412. Charolais
- 413. Hereford
- 414. Shorthorn
- 415. Simmental

Horse

- 416. Appaloosa
- 417. Arabian
- 418. Belgian
- 419. Clydesdale
- 420. Morgan
- 421. Paint
- 422. Percheron
- 423. Quarter Horse
- 424. Saddlebred
- 425 Tennessee Walking Horse
- 426. Thoroughbred

Goat

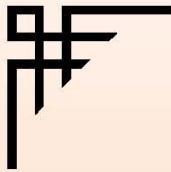
- 427. Alpine
- 428. Nubian
- 429. Angora
- 430. Boer
- 431. LaMancha
- 432. Saanen
- 433. Toggenburg

Sheep

- 434. Columbia
- 436. Dorset
- 437. Hampshire
- 438. Merino
- 439. Rambouillet
- 440. Southdown
- 441. Suffolk

Swine

- 442. American Landrace
- 443. Berkshire
- 444. Chester White
- 445. Duroc
- 446. Hampshire
- 447. Yorkshire



Multi Purpose B CDE form# 228576

Incorrect Marks Correct Mark

✓ X ○ ●

Team Name

Delaware FFA Middle School

Veterinary Science CDE

Team/Schl ID#	State	Full Name (Last name followed by a space followed by 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	
2 2 2 2	B B B B B B B B B B B B B B B B B B	
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5 5 5 5	E E E E E E E E E E E E E E E E E E	
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Codes

Sheet	Test	Team	Student
0 0 0 0			
1 1 1 1			
2 2 2 2			
3 3 3 3			
4 4 4 4			
5 5 5 5			
6 6 6 6			
7 7 7 7			
8 8 8 8			
9 9 9 9			

Place	Placing Classes										Place		
	Class												
	1	2	3	4	5	6	7	8	9	10			
1	1 2 3 4											1 2 3 4	1
2	1 2 4 3											1 2 4 3	2
3	1 3 2 4											1 3 2 4	3
4	1 3 4 2											1 3 4 2	4
5	1 4 2 3											1 4 2 3	5
6	1 4 3 2											1 4 3 2	6
7	2 1 3 4											2 1 3 4	7
8	2 1 4 3											2 1 4 3	8
9	2 3 1 4											2 3 1 4	9
10	2 3 4 1											2 3 4 1	10
11	2 4 1 3											2 4 1 3	11
12	2 4 3 1											2 4 3 1	12
13	3 1 2 4											3 1 2 4	13
14	3 1 4 2											3 1 4 2	14
15	3 2 1 4											3 2 1 4	15
16	3 2 4 1											3 2 4 1	16
17	3 4 1 2											3 4 1 2	17
18	3 4 2 1											3 4 2 1	18
19	4 1 2 3											4 1 2 3	19
20	4 1 3 2											4 1 3 2	20
21	4 2 1 3											4 2 1 3	21
22	4 2 3 1											4 2 3 1	22
23	4 3 1 2											4 3 1 2	23
24	4 3 2 1											4 3 2 1	24

Team Activity		Practicums (Judges)					
Team	Ind.	1	2	3	4	5	6
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							
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9 9 9 9 9 9 9 9							

Assessment and Solution									
1	A B C D E	1	A B C D E	21	A B C D E	31	A B C D E		
2	A B C D E	2	A B C D E	22	A B C D E	32	A B C D E		
3	A B C D E	3	A B C D E	23	A B C D E	33	A B C D E		
4	A B C D E	4	A B C D E	24	A B C D E	34	A B C D E		
5	A B C D E	5	A B C D E	25	A B C D E	35	A B C D E		
6	A B C D E	6	A B C D E	26	A B C D E	36	A B C D E		
7	A B C D E	7	A B C D E	27	A B C D E	37	A B C D E		
8	A B C D E	8	A B C D E	28	A B C D E	38	A B C D E		
9	A B C D E	9	A B C D E	29	A B C D E	39	A B C D E		
10	A B C D E	10	A B C D E	30	A B C D E	40	A B C D E		

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

Written Exam
50 Questions @ 2 point each = 100 points total

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