TEXAS A&M
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EXTENSION

Texas 4-H Veterinary Science Skillathon

2016 Invitational Contest Rules & Guidelines
Thursday, June 9, 2016
Please note. 2016 Texas 4-H Roundup Veterinary Science Skillathon will be held at the Texas A&M College of Veterinary Medicine & Biomedical Sciences!

11-24-2015

OVERVIEW

The Veterinary Science Skillathon is a competitive event designed to test the knowledge and skills that a 4-H member can gain through his or her involvement in a Veterinary Science project. There are several components to the contest. The Written Exam is to test the participant's subject matter knowledge. The Skills Exam tests the hands-on or experiential learning and is the largest component of the contest. The Identification (ID) Exam will include Veterinary Instruments, Breeds (cattle, horses, sheep, goats, swine, dogs, and cats), Parasites, and Internal Organs. Finally, the Communication portion of the contest helps to develop research and public speaking skills.

OBJECTIVES OF THE 4-H VETERINARY SCIENCE PROJECT

1. Utilize career-oriented resource material and supplements that provide lessons, questions, and activities.
2. Develop the interest, knowledge, skills, and experiences of youth in veterinary science for a career in veterinary medicine (veterinary assistant, veterinary technician or veterinarian), human medicine (paraprofessional or physician), or allied health fields (diagnostics, therapeutics).
3. Prepare youth in workforce development, prepare youth to pursue an associate degree college program, and prepare youth to pursue a professional degree college program.

ELIGIBILITY AND GUIDELINES

1.   *Application Date*. Must submit completed application with signatures **emailed by Friday, March 25, 2016** to Joe W. Mask:

> 4-H Veterinary Science Skillathon
> Dr. Joe W. Mask
> Assistant Professor & Extension Specialist
> Texas A&M AgriLife Extension Service
> joe.mask@ag.tamu.edu

Applicants will be notified of the acceptance into the contest by Monday, April 11, 2016.

2. *Project enrollment*. Participants must be active Texas 4-H members currently enrolled in the 4-H veterinary science project. Participants must also have completed at least one full calendar year in a structured veterinary science program.

3. *Age*. Participants must be Intermediate or Senior aged 4-H members as of September 1, 2015 school year.

Division	Grade in School
Intermediate	$6^{th} – 8^{th}$ grade
Senior	$9^{th} – 12^{th}$ grade

4. *Skillathon levels*. The contest will be divided into two (2) experience levels. Participants that have completed 20-60 lessons from the *Veterinary Assistant Handbook* or *Veterinary Science: Preparatory Training for the Veterinary Assistant* will be placed in Level 1. Participants that have completed more than 60 lessons from the *Veterinary Assistant Handbook* or *Veterinary Science: Preparatory Training for the Veterinary Assistant* will be placed in Level 2. *Please note that these levels are based on <u>veterinary science project experience</u>, not age, grade, or years in 4-H.*

   Refer to the attached *Texas 4-H Veterinary Science Lesson Plan Model* and the attached *Texas 4-H Veterinary Science Clinical Skills Model* to see which lesson topics and skills will be covered in each Level of the contest. Level 1 of the skillathon will cover information listed in Lessons 1-60 and Clinical Skills Categories 1-12. Level 2 of the skillathon will cover information listed in Lessons 1-100 and Clinical Skills Categories 1-20. Further explanation of the clinical skills categories can be found on the Texas Veterinary Medical Association's *Veterinary Assistant Skills Validation Checklist* at http://aevm.tamu.edu/files/2010/06/Veterinary-Assistant-Skills-Validation-Checklist.pdf. The *TVMA Checklist* will be used as a guide when selecting skills for the skillathon.

5. *Maximum number of participants*. The contest will be limited to the top twenty (25) applicants in each Level, for a total maximum of fifty (50) participants. There is no limit to the number of applications that a county may submit.

6. *Contest participation*. This will be an *individual* contest.

7. *Agent certification*. Applications must be signed by the County Extension Agent to certify current membership, grade in school, and project experience.

CONTEST COMPONENTS
There will be four (4) components or "rounds" to the contest. Each component will be weighted in the following manner for scoring purposes:

Written Exam	200 points	(20%)
ID Exam	150 points	(15%)
Skills Exam	500 points	(50%)
Communication	150 points	(15%)
Total	1000 points	(100%)

All participants will compete and earn points in the first three (3) rounds of Written Exam, Identification Exam, and Skills Exam, for a maximum of 850 points. The top three (3) participants earning the most points in the first three (3) rounds will then advance to the Communication round. Total scores to establish final ranking will be determined by adding points earned in all four (4) contest components, for a maximum of 1000 points.

Written Exam
Questions will be written regarding information selected from the *Veterinary Science: Preparatory Training for the Veterinary Assistant*. Questions will be derived from the lessons in the reference book, as well as, from the knowledge that can be obtained by participating in activities of the veterinary science project. Questions may be multiple choice, true/false, matching, identification, or short answer. There will be 100 questions, each worth two (2) points, for a total of 200 points.

Identification Exam

Identification Exam: The Identification Exam will include Veterinary Instruments, Breeds (cattle, horses, sheep, goats, swine, dogs, and cats), Parasites, and Internal Organs. This portion will be made up of 50 questions worth 3 points each for a total of 150 points.

Skills Exam
The Skills Exam will be the hands-on component of the contest. Participants will perform the skills individually. The ability to perform these skills will come from working as trainee under the supervision of a veterinarian.

Refer to the attached *Texas 4-H Veterinary Science Clinical Skills Model* to see which skills will be covered in each Level of the contest. Further explanation of these clinical skills categories can be found on the Texas Veterinary Medical Association's *Veterinary Assistant Skills Validation Checklist*. The *TVMA Checklist* will be used as a guide when selecting skills for the skillathon. The *TVMA Checklist* can be found at the following link:
http://aevm.tamu.edu/files/2010/06/Veterinary-Assistant-Skills-Validation-Checklist.pdf

At each skills station, instructions and time constraints will be provided. The skills will be judged using a rubric for thoroughness, safety, and overall completion of the skill in the allotted time. The Skills Exam will be worth 500 points total. Each skill may be weighted with different point values depending upon the complexity of the skill.

Communication
Three (3) participants earning the highest total points from the first three (3) contest components (Written Exam, Identification Exam, and Skills Exam) will individually present a 3-5 minute informative speech related to the specified topic without using any outside materials. Each year, a list of five (5) possible topics will be identified so that preparation may begin prior to the contest. From these five (5) topics, one will be selected by contest officials as the Communication round topic for the contest. Participants will receive the selected speech topic the day of the contest and will have no less than 15 minutes to prepare. Judges may ask questions. Spectators and eliminated participants may watch the Communication round, but may not speak, signal, or otherwise communicate with participants. Spectators and eliminated participants may not ask questions. The Communication round will be worth 150 points.

For the 2016 Invitational 4-H Veterinary Science Skillathon, the possible topics are as follows:

Level 1
- Storage of Foods
- Assistance at Birth
- Genetics & Diseases
- Client Communication
- The Veterinary Assistant

Level 2
- Poisonous Plants
- Controlling Internal Parasites
- Causes of Infectious Diseases
- Food Safety Program
- Laws Related to Veterinary Medicine

CONTEST SCHEDULE

Please note: This schedule may be modified slightly once applications are received.

7:45-8:00am	Volunteer Arrival & Check-in
8:00-8:15am	Volunteer Orientation
8:00-8:15am	Participant Arrival & Check-in
8:15-8:30am	Participant Orientation

Level 1	
8:30-9:10 am	ID Exam
9:20-10:00 am	Written
10:10-12:00pm	Skills

Level 2	
8:30-9:10 am	Written
9:20-10:00 am	ID Exam
10:10-12:00pm	Skills

12:00	Break for Lunch
	Tabulation
12:30pm	Announcement of Final Round Contestants
12:40pm	Final Round Contestants to Holding Room to draw for order
12:45pm	First Communication Round Contestant Enters Prep Room
1:00-2:45pm	Final Communication Round
2:45-3:00pm	Final Tabulation
3:15pm	Awards Presentation
7:00pm	Finalist Award Line Up

CONTEST RESOURCES

- *Veterinary Science: Preparatory Training for the Veterinary Assistant*
  Author: Floron C. Faries, Jr.
  http://aevm.tamu.edu/4-h-veterinary-science/handbook-information/books/

- *Texas 4-H Veterinary Science Lesson Plan Model*. The *Lesson Plan Model* indicates which lesson topics will be covered in each level of the skillathon. Level 1 of the skillathon will cover information listed in lessons 1-60. Level 2 of the skillathon will cover information listed in Lessons 1-100.
  http://aevm.tamu.edu/files/2011/09/VSLesson_Model2.pdf

- *Texas 4-H Veterinary Science Clinical Skills Model*. The attached *Clinical Skills Model* indicates which skills will be covered in each level of the skillathon. Level 1 of the skillathon will cover information listed in Clinical Skills Categories 1-12. Level 2 of the skillathon will cover information listed in Clinical Skills Categories 1-20.

- *Texas Veterinary Medical Association's Veterinary Assistant Skills Validation Checklist*. The *TVMA Checklist* provides further explanation of the twenty (20) clinical skills categories listed in the *Texas 4-H Veterinary Science Clinical Skills Model*. The *TVMA Checklist* will be used as a guide when selecting skills for the skillathon.
   http://aevm.tamu.edu/files/2010/06/Veterinary-Assistant-Skills-Validation-Checklist.pdf

HELP NEEDED CONDUCTING THE CONTEST
County Extension Agents and screened volunteers will be needed on the day of the contest to help. Assistance will be needed for many different parts of the contest including check-in, group leaders, score keepers, tabulation, etc. If interested, contact one of the Contest Superintendents.

CONTEST SUPERINTENDENT
If you have any questions, please contact one of the following:

Dr. Joe W. Mask
Assistant Professor & Extension Specialist
Texas A&M AgriLife Extension Service
2501 Earl Rudder Freeway South, Suite 701
College Station, Texas 77845
979.845.4353
joe.mask@ag.tamu.edu

Texas 4-H Veterinary Science Lesson Plan Model

This is a suggested model for teaching 4-H members in the 4-H Veterinary Science project. This list can be modified to fit the needs of each county.

Texas 4-H Veterinary Science Skillathon. Level 1 of the skillathon will cover information listed in Lessons 1-60. Level 2 of the skillathon will cover information listed in Lessons 1-100.

Lesson	Subject
1	The Profession of Veterinary Medicine
2	The Veterinary Assistant
3	Animals and Society
4	Office Procedures
5	Client Communications
6	Employee Communications
7	Clinic Infectious Disease Control
8	Storage of Foods
9	Caring for Patients
10	Pain Recognition
11	Environmental Sanitation
12	Bedding and Housing of Patients
13	Anatomy and Physiology of Animals
14	Integrated Resource Management
15	Records & Record Keeping
16	Marketing Animals
17	Preparing Livestock for Shipment
18	Interstate & International Movement of Animals
19	Brucellosis & Tuberculosis Eradication Programs
20	Rabies Control Program
21	Reading Animal Behavior
22	Vital Signs
23	Genetics
24	Determining the Age of Animals
25	Breeds of Dogs & Cats
26	Breeds of Livestock
27	Essential Food Nutrients
28	Nutrition and Management of Dogs, Cats, & Exotic Pets
29	Nutrition and Management of Livestock
30	Introduction to Handling and Restraining Animals
31	Common Knots
32	Handling and Restraining Dogs and Cats
33	Handling and Restraining Livestock
34	Handling and Restraining Rodents, Rabbits, & Exotic Animals
35	Dehorning, Castrating, & Docking

36	Collecting & Handling Semen
37	Artificial Insemination
38	Reproduction & Rectal Palpation in Cattle
39	Weaning Calves
40	Assistance at Birth
41	Physical Examinations
42	First Aid
43	Applying Bandages
44	Handling & Administering Medications
45	Rehabilitation
46	Bacteriologic Tests
47	Fecal, Blood, & Urine Examinations
48	Special Examinations
49	Radiology
50	Post-Mortem Examinations
51	Genetics & Disease
52	The Battle Against Disease
53	Food & Animal Diseases
54	Economic Losses
55	Anthrax Control Program
56	Pseudorabies Control Program
57	Pullorum-Typhoid, Avian Influenza, & Exotic Newcastle Disease Control Programs
58	Bovine Trichomoniasis Control Program
59	Vesicular Stomatitis Control Program
60	West Nile Encephalitis Control Program
61	Diseases Common to Humans & Animals
62	Animal Assisted Therapy
63	Causes of Infectious Diseases
64	Infectious Diseases: Digestive System
65	Infectious Diseases: Respiratory & Reproductive Systems
66	Infectious Diseases: Integumentary System
67	Infectious Diseases: Cardiovascular & Lymphatic Systems
68	Infectious Diseases: Musculoskeletal System & Nervous Systems
69	Infectious Diseases: Special Senses & Generalized Conditions
70	Nutritional Diseases
71	Reproductive Non-Infectious Diseases
72	Chemical Poisoning
73	Toxicity of Insecticides
74	Poisonous Plants
75	Miscellaneous Non-Infectious Diseases
76	Food Safety Program
77	Drug Residue Avoidance Program
78	Carcass Disposal Regulations
79	Medical Waste Disposal

80	Animal Welfare Regulations
81	Prevention
82	Treatment
83	Controlling Internal Parasites
84	Controlling External Parasites
85	Veterinary Biological Products
86	Disinfectants
87	Dietary Management of Small Animals
88	Quarantines & Eradication Programs
89	Sterilization
90	Disinfection
91	Surgical Instruments & Technology
92	Surgical Preparation & Procedures
93	Anesthesia
94	Preparing Hands & Field Operation
95	Sterile Gloves & Gowns
96	Pesticide Regulations
97	Laws Related to Veterinary Medicine
98	Natural, Accidental, & Intentional Outbreaks of Disease
99	Emergency Animal Management During Disasters
100	Clinic Emergency Management Plans

Texas 4-H Veterinary Science Clinical Skills Model

This is a suggested model for teaching clinical skills to 4-H members in the 4-H Veterinary Science project that should complement the Lesson Plan Model. *This list can be modified to fit the needs of each county.*

This document lists twenty (20) categories of clinical skills. The *Texas Veterinary Medical Association's Veterinary Assistant Skills Validation Checklist* provides further explanation of these twenty (20) clinical skills categories.

Category	Clinical Skill
1	Monitoring drug inventory
2	Cleaning and exercising animals
3	Feeding and watering animals
4	Cleaning animal housing
5	Communicating with clients on admitting animals − Taking reasons, history
6	Recording medical records − History − Examination − Vital Signs
7	Handling instruments
8	Handling equipment
9	Handling animals − Calming, moving − Weighing − Restraining
10	Examining animals − Temperaturing
11	Monitoring behavior of animals
12	Performing sanitary procedures
13	Collecting lab samples − Feces, blood, urine, skin
14	Taking radiographs
15	Medicating animals
16	Bandaging animals
17	Preparing surgical packs
18	Assisting in surgery
19	Recording medical records − Treatment
20	Communicating with clients on dismissing animals − Instructions, educational materials