Texas 4-H Veterinary Science Skillathon
2009 Pilot Contest Study Guide

Congratulations for being selected to participate in the 2009 Texas 4-H Veterinary Science Skillathon Pilot Contest! Enclosed you will find the lessons, information, and tips that you need to become familiar with when studying for the Veterinary Science Skillathon. If you do not have a copy of the needed lesson, you may contact your team members to see if they can provide you with one, order a copy of the curriculum (see “Resources” section of this study guide), or you may contact your county Extension office to see if there is a copy available in your county for check-out.

Attached you will find your teammates names, email addresses, and home phone numbers. You are encouraged to get to know one another via technology (phone, email, chats, etc.) prior to the contest. You can also start to learn about your teammates’ strengths and weaknesses in relation to their veterinary science knowledge base to make your team stronger.

Hint: When studying for the Skillathon contest, it may help to take the following approach: What would I need to know to work in a veterinary clinic?

Orientation Meeting via technology
In order to help address any questions or concerns, we would like to conduct an Orientation Meeting via technology. You will need an internet connection, speakers, and preferably a microphone. If you do not have this at home, please contact your County Extension Agent to use their office. 4-H participants, parents, and County Extension Agents of the 4-H Veterinary Science Skillathon participants are welcomed and encouraged to attend this meeting. More information will be sent once a date is set. In order to set a date, we would like to know when you’re available. Please go to this link (http://www.doodle.com/gi4pvx5cqhb4k98t) and select all the times that you could be available to meet. Please do this by Friday, May 8, 2009 so that we can let everyone know the details.

Date, Time, and Location
The Veterinary Science Skillathon Pilot Contest will be held at the College of Veterinary Medicine and Biomedical Sciences on campus at Texas A&M University in College Station, Texas. The Vet School is located on the corner of Agronomy Drive and University Drive (FM 60 and also called Raymond Stotzer Parkway). The main entrance is located on University Drive.

The contest will be held on Tuesday, June 9, 2009. Check-in will begin at 7:30am. The contest will begin at 8am. Please plan to check-in prior to the start time, so that we may begin in a timely manner. This contest will take some time to complete and following it, we would like your feedback so that we can make it better for all 4-H members across the state!

Study Guide & Guidelines
On the following pages, you will find the material you need to study to have a successful experience at the skillathon. Please note that some of the guidelines have some minor changes to better accommodate the number of applicants for the skillathon. Please use this manual as the latest guidelines for the event.
**Written Exam**

*Guidelines*

The written exam will be taken individually. The 4 team members’ score will be averaged together to create the team’s score. The written exam will be a mixture of multiple choice, true/false, matching, identification, fill-in-the-blank and short answer. The written exam will consist of 50 questions. Questions will be worth 2 points each.

To prepare for this section read the following lessons and be familiar with terminology, charts/graphs, identification of symptoms and diseases, as well as how procedures work. You should also become familiar with the questions/answers found at the end of each lesson.

For example, “Brucellosis is caused by a _________________.
  a. virus
  b. parasite
  c. bacteria
  d. none of the above

*Lessons*

Study the following lessons:
  a. 1.1 – The Profession of Veterinary Medicine
  b. 2.1 – Office Procedures
  c. 3.1 – Caring for Patients
  d. 3.2 – Environmental Sanitation
  e. 4.1 – Anatomy and Physiology of Animals
  f. 4.2 – Behavior and Vital Signs
  g. 4.6 – Breeds of Livestock
  h. 7.1 – Physical Examinations
  i. 7.2 – Handling and Administering Medications
  j. 7.3 – Applying Bandages
  k. 7.4 – First Aid
  l. 9.1 – Causes of Disease
  m. 9.2 – How Diseases and Parasites are Spread
  n. 9.5 – Diseases Common to Humans and Animals
  o. 11.1 – Nutritional Diseases
  p. 11.2 – Reproductive Problems
  q. 12.1 – Prevention
  r. 12.5 – Veterinary Biological Products
  s. 12.6 – Disinfectants
  t. 12.8 – Quarantines and Eradication Programs
  u. 14.1 – Surgical Instruments and Terminology
  v. 14.2 – Surgical Preparation and Procedures
  w. 15.1 – Integrated Resource Management
  x. 16.13 – Medical Waste Disposal
Skills Exam

Guidelines
Your team will be asked to complete a minimum of 10 skills. At each skills station, instructions and time constraints will be provided. At some skills stations, your team may need to select 1 or 2 members to conduct the skill representing the entire team. (Team members may discuss how to complete the skill before and during the skill.) The skills will be judged using a rubric for thoroughness, safety, and overall completion of the skill in the allotted time. Most skills can be completed in approximately 5 minutes. Each skill station will be worth 10 points.

Lessons
The skills that you will be evaluated on will cover the following lessons. Below each lesson is the area/technique with which you need to be familiar. You can work with your veterinarian if you are unfamiliar with some of the skills.

Study the following lessons:

a. 3.1 – Caring for Patients
   i. Know how to properly handle animals
   ii. What environmental conditions are needed to provide comfort

b. 3.2 – Environmental Sanitation
   i. Cleaning kennels

c. 4.2 – Behavior and Vital Signs
   i. Identify behavior in animals
   ii. Basic vital sign statistics

d. 4.6 – Breeds of Livestock
   i. Identify breeds and characteristics

e. 6.1 – Introduction to Handling and Restraining Animals
   i. How to properly restrain/handle an animal

f. 7.2 – Handling and Administering Medications
   i. How to draw up medications
   ii. Proper technique for administering medications

g. 7.3 – Applying Bandages
   i. How to wrap a bandage

h. 8.1 – Fecal Examinations
   i. Perform a fecal exam (both gross examination and fecal float)

i. 14.1 – Surgical Instruments and Terminology
   i. Match up tool with function

j. 16.11 – Drug Residue Avoidance Program
   i. Proper use of drugs. Identify storage, species, use and withdrawal time.

Quiz Bowl

Guidelines
The Quiz Bowl will be conducted as a team event. Each team will participate in one session of 30 questions. To keep a level playing field, each team will be asked the same 30 questions. The Quiz Bowl will follow a similar pattern as standard Texas 4-H Quiz Bowls. Each match will be divided into two rounds: Individual Questions and Toss-Up Questions. Up to three (3) bonus questions may be attached to toss-up questions. No coaches will be allowed in room.

During the Individual Question Round, only one team member may respond to a given question. During the Toss-Up Question Round, any member of either team is eligible to respond to a given question. To answer any
question, a participant must buzz in and be acknowledged by the moderator. If a participant answers a question without being acknowledged, the team loses one point.

The moderator reads each question until he or she finishes asking the question or until a contestant activates a buzzer. If the allowed time elapses (10 seconds) and no contestant activates a buzzer, neither team gains or loses points. If a buzzer is activated while a question is being read, the moderator immediately stops reading the question and the contestant activating the buzzer has 10 seconds after being acknowledged (the moderator will announce before play the method of acknowledgment) to begin to answer the question. To answer any question, a participant must buzz in and be acknowledged by the moderator. If a participant answers a question without being acknowledged, the team loses one point. If the contestant repeats the question, it is not considered the initiation of an answer. It is the moderator and/or timer’s responsibility to determine if the actual answer has been started with the 10-second period. This ruling cannot be protested.

If the answer to any question, whether read to completion or not, is incorrect, the question is not repeated for the opposing team and is discarded. It is optional to read the correct answer.

If a team begins to answer a question during the 10-second period and the answer is incorrect, that team loses one point.

If a team correctly answers a question within the 10-second period, it gains one point.

No coaches will be allowed in the room.

For more information about Quiz Bowl guidelines, you can view the Quiz Bowl Guide at the following link: http://texas4-h.tamu.edu/publications/Project/quizbowl/16083106-4H32030.pdf. The above rules come from the “Procedures of Play” section beginning on page 11.

**Lessons**
The same lessons that were covered in the Written Exam section and the Skills Exam section will be covered in the Quiz Bowl section. In order to prepare for this competition, read the assigned lessons and be familiar with terminology, overall topics, and questions from the homework.

**Communication**

**Guidelines**
A representative from each team will “draw out of a hat” the topic your group will present the day of the competition. Your team will have no less than fifteen (15) minutes to prepare your presentation using your resource materials. Each team is responsible for bringing their own resource material with them to the contest. During the presentation, no notes will be allowed. Each team will have 5-8 minutes to cover one of the following programs. All team members will participate in the communication section with a minimum of three (3) team members having speaking roles. With each topic, be sure to cover all points listed here. This is the only round of the skillathon that is “open to the public” such as parents, leaders, etc. Team members will not be permitted to watch other team presentations. No video or audio recording will be permitted. Only judges may ask questions. The Communication round is worth 100 points.

**Topics**

a. Trichomoniasis Eradication Program
   i. Causative agent
   ii. Transmission
   iii. Diagnosis
   iv. Prevention
v. Control/Eradication  
b. Cattle Fever Tick Control Program  
i. Causative agent  
ii. Transmission  
iii. Diagnosis  
iv. Prevention  
v. Control/Eradication  
c. Rabies Control Program  
i. Causative agent  
ii. Transmission  
iii. Diagnosis  
iv. Prevention  
v. Control/Eradication  
d. Infectious Laryngotracheitis Control Program  
i. Causative agent  
ii. Transmission  
iii. Diagnosis  
iv. Prevention  
v. Control/Eradication  
e. Foreign Animal Disease Control Program  
i. Compare and contrast Foot and Mouth Disease to Bovine Spongiform Encephalopathy

Resource Material  
Veterinary Assistant Handbook First Edition  
Author: Floron C. Faries, Jr.  
Instructional Materials Service  
Texas A&M University  
http://www-ims.tamu.edu/  
979-845-6601

Direct Link to Order Form:  
4041 Veterinary Assistant Handbook $40.00  
4041TG Teacher’s Guide for Veterinary Assistant Handbook $10.00  
4041TK Teacher’s Key for Veterinary Assistant Handbook $25.00

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

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