Veterinary Science Contest

DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

State 4-H O'Rama

Senior 4-H'ers

OBJECTIVES

Targeted Life Skills: responsibility, self-motivation, marketable skills, using resources, organizing, record keeping, critical thinking, problem solving, decision making, learning to learn

This activity will train 4-H members in practices related to veterinary medicine, veterinary diagnostic techniques and equipment identification, and diagnostic methods utilized in the veterinary medicine field.

This is a team activity.

ELIGIBILITY

State 4-H O'Rama: Each county may enter four senior members (ages 14-19) to participate in this activity. These four individuals will compete as a team. The top 3 individual scores will be included in the team total.

ACTIVITY

Contestants will have 1.5 hours to complete all sections of the Veterinary Science contest at their own pace. Score cards and identification lists will be provided. Teams will start on the team activities, and will rotate to individual activities after the completion of the team stations.

CONTEST SECTIONS

1. **Individual Stations**
   a. **Animal Breed Identification:** (40 points) Identify from photographs 40 animal breeds (including beef cattle, dairy cattle, swine, sheep, goat, horse, poultry, dog, cat, other pets, and wildlife/exotic).

   b. **Veterinary Equipment Identification:** (40 points) Identify the proper name for 20 pieces of equipment used in livestock production. (A list of equipment will be provided.)

   c. **Anatomy and Physiology Identification:** (40 points) Identify the proper anatomical name for 20 anatomical parts of animals (beef cattle, dairy cattle,

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swine, sheep, goat, horse, poultry, dog, and cat) and which major body system it originates. Major body systems include skeletal, muscular, nervous, respiratory, gastrointestinal, and renal systems. (A list of body systems will be provided.)

d. **Quiz:** (60 points) Complete a 30-question multiple choice quiz concerning veterinary medicine. Topics may include normal vital signs for livestock animals, animal disease, wound care, pharmacology, clinical procedure, handling and restraining, and others.

2. **Team Stations**
   a. **Pharmacology – Medical Calculations and Dosages:** (40 points) Calculate the proper dosage for a given medicine (antibiotic, corticosteroid, analgesic, anesthetic, cardiac/blood pressure, anti-parasitic, gastrointestinal, and other miscellaneous drugs) used in veterinary medicine based on a scenario given and medication labels provided.

   b. **Case Studies – Determining Illness:** (60 points) Determine the likely cause of illness based on a given scenario. This portion may include identifying the probable cause of disease, causative agent(s), primary mode of transmission, samples to collect for testing, differential diagnosis, clinical impact, recommended treatment, and control of the disease, depending on the scenario.

Total possible individual points for senior 4-H'ers: **180 points**

Team Score Calculation:

Top 3 Individual Scores	540 points
Team Station Total Score	100 points
Total Possible Team Score	**640 points**

AWARDS

State 4-H O'Rama: One trophy will be awarded to the high-scoring senior. Second through fifth place winners will receive ribbons.

CONTEST ADMINISTRATION

Kirsten Midkiff – Assistant Professor, Animal Health and Wellbeing specialist

Revised 02/2026