

Kittitas County Animal Science & Quality Assurance Checklist

Member's Name: _____ 4-H Club: _____

Indicate the 4-H Year's enrolled in the project below:

This program incorporates a series of age-appropriate, skill-based objectives to guide and encourage 4-H members in gaining a diverse working knowledge related to the animal industry. These skills are in addition to the basic Kittitas County 4-H Livestock Project.

All individuals (regardless of age) should begin with Level 1. Youth must complete at least 5 skills a year: at least 3 of these must be a Quality Assurance [QA] noted activity. A minimum of 15 total skills – **9 being QA**, should be completed before advancing to the next level. Older youth just entering the (species) project are encouraged to move through Levels 1 and 2 at an accelerated rate to enhance their overall 4-H career learning experience. *(Note: submit this updated checklist annually with your animal project record book.)*

Level 1		Completed (mm/dd/yy)	Leader's Initials
[QA]	Describe the basic facilities (housing, pen space & equipment) needed to safely raise your project animal(s).		
	Develop a basic (species) project plan (including income, expenses, and facilities).		
	Individually identify each animal (ear tag, etc.)		
[QA]	Describe the reason to provide livestock bedding for your animal		
	Define the following terms: purebred, crossbred, conformation, carcass.		
	Describe the following animal selection traits: muscling, trimness, growth & frame, structure & balance and why they are important.		
	Describe the following animal selection traits: muscling, trimness, growth & frame, structure & balance and why they are important.		
	List the six basic classifications of nutrients.		
[QA]	Explain why it is important to have a fresh, clean source of water.		
	Explain the purpose of a feed label.		
	List the two types of digestive systems found in most domestic farm animals.		
	Describe what average daily gain and feed efficiency are.		
[QA]	Describe at least 5 symptoms/behaviors of a healthy animal.		
[QA]	Explain what external and internal parasites are.		
	Prepare a list of livestock equipment & supplies needed at a Fair.		
	Demonstrate appropriate safety precautions while properly grooming & showing your animal(s).		
	Identify factors that could cause stress in your project animal.		
[QA]	Identify 5 humane treatments of animals and 2 inhumane treatments.		
[QA]	Conduct a safety evaluation of your livestock facilities; report any changes needed/made to promote animal well-being.		
[QA]	Explain how a veterinarian can help you keep your animal healthy.		
[QA]	Describe where vaccinations should be given on your animal		
[QA]	Name 3 things you can do to minimize parasites on/in your animal.		

[QA]	Define medication withdrawal time.		
[QA]	Define the following terms: ethics, sportsmanship, quality assurance.		
[QA]	Describe what an animal by-product is.		

Level 2		Completed (mm/dd/yy)	Leader's Initials
[QA]	Explain impact of temperature extremes (hot & cold), wind and humidity on livestock performance.		
[QA]	Describe what steps can be taken to minimize odors from manure.		
[QA]	Identify at least 3 problems created by insufficient air circulation within livestock facilities.		
	Describe the difference between a dominant and recessive gene.		
	Explain what a crossbreeding program is and why would it be used.		
	Identify heat detection methods used for your species of animal.		
	Identify at least 5 locations used to estimate the degree of muscling and/or degree of finish.		
	Describe the industry standards for your species of animal.		
	Evaluate, rank and give reasons on a class of four animals.		
	Describe how nutritional requirements vary based on animal's stage of growth or production.		
[QA]	List at least 7 pieces of information found on a feed tag.		
	Describe the differences between a monogastric and ruminant digestive system.		
	Demonstrate how to calculate average daily gain and feed efficiency.		
[QA]	List 7 symptoms that might indicate your animal is sick.		
[QA]	Explain the difference between a vaccination and a medication		
[QA]	List at least 3 internal and 2 external parasites common to your animal.		
	Demonstrate proper grooming and showmanship techniques for younger members in your group.		
	Describe the difference between wholesale and retail cuts of meat.		
	List the applicable USDA Quality and/or Yield Grades for your species.		
	Demonstrate how to use a carcass grid and/or probe in taking carcass measurements.		
	Name the six pillars of characters.		
[QA]	Describe 5 things producers can do to minimize stress when handling animals.		
[QA]	Describe the difference between a "caution" and "warning" on a feed tag.		
[QA]	Describe a valid Veterinary-Client-Patient relationship.		
[QA]	List at least 6 pieces of information found on a medication label.		
[QA]	Describe why it is important to follow medication withdrawal times.		

Level 3		Completed (mm/dd/yy)	Leader's Initials
	Explain the roles of estrogen, FSH, LH and progesterone in male & female reproductive physiology.		
	Define heritability and how it is used in breeding management decisions		
	Identify the parts of the species female and male reproductive tracts.		
	Describe what artificial insemination and embryo transfer is and why producers might use them		
	Explain why structural soundness is critical in both breeding and market animals; list 5 common structural defects within your species.		
	List the 10 essential amino acids.		
	Describe difference between fat-soluble and water-soluble vitamins; list the 4 fat-soluble vitamins.		
	Name in order the four compartments within the ruminant stomach; explain how roughages are broken down within that system.		
	Explain why average daily gain and feed efficiency are critical factors for successful livestock production operations.		
[QA]	Describe the physical and economic impacts that parasites have on animal production.		
	Name all the wholesale cuts of meat for your project animal species.		
	Explain how the USDA Quality and/or Yield Grades for your species are determined.		
[QA]	Identify 4 examples of unethical behavior; explain why each is wrong and what you think the consequences should be for someone doing that.		
	Track weekly market prices for US No 1 hogs, choice lambs or choice/yield grade 3 steers. Plot this information on a graph.		
[QA]	Develop a balanced ration for your project animal species.		
[QA]	Prepare/give a 7-10 minute presentation on nutrition at your club or group meeting		
[QA]	Prepare/give a 7-10 minute presentation on health care at your club or group meeting		
	Prepare/give a 7-10 minute presentation on genetics at your club or group meeting		
	Prepare/give a 7-10 minute presentation on reproduction at your club or group meeting		
[QA]	Prepare/give a 7-10 minute presentation on ethics education at your club or group meeting		
	Prepare/give a 7-10 minute presentation on related career opportunities at your club or group meeting		
[QA]	Name and describe at least four common routes of administering a health care product.		
[QA]	Describe the preferred method of administering a vaccine (if not specified) and why it is preferred.		
[QA]	Name at least 8 items that should be listed on an animal treatment record.		
[QA]	Explain the differences between "extra-labelled" and "off-labelled" use of medications or vaccines.		
[QA]	Prepare/give a 7-10 minute presentation on meat quality at your club or group meeting		
[QA]	Prepare/give a 7-10 minute presentation on quality assurance practices at your club or group meeting		

Adapted by WSU Kittitas County Extension, November 2021. Original source: University of Idaho Extension, Animal Science Lesson Program.