



## Idaho 4-H Animal Science Lesson Program Checklist

Member's Name: \_\_\_\_\_ 4-H Club: \_\_\_\_\_

Indicate the years (i.e. 2015, 2016, 2017) 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 Idaho 4-H project requirements listed below:

- Choose your project animal(s)
- Individually identify each animal (ear tag, etc.)
- Complete project record & involvement report
- Exhibit project animal(s) in quality/showmanship
- Complete Permanent Individual Animal Record – one/animal (breeding only)
- Provide positive proof of ownership based of required days
- Weigh & give primary care during county feed period (market only)
- Give oral presentation related to this project
- Complete any other County-based requirements

All individuals (regardless of age) should begin with Level 1. Youth must complete at least 5 skills/year; at least one of these must be a Quality Assurance [QA] noted activity. A minimum of 15 different skills 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
	Develop a basic (species) project plan (including income, expenses and facilities)		
	Describe the basic facilities (housing, pen space & equipment) needed to safely raise your project animal(s)		
	Make a list of goals you plan to reach as you raise a livestock project		
	Describe the reason to provide livestock bedding for your animal		
	Describe how temperature and air flow can affect the performance and health of an animal		
	Demonstrate how knowing the flight zone of an animal can help you be safe when working with an animal		
	Identify at least 5 breeds within your project species		
	Estimate what the market weight or frame size of your animal should be by the county fair		
	Identify at least 20 parts of the animal within your project species		
	Describe the importance of raising a structurally correct animal		
	Describe the following animal selection traits: muscling, trimness, growth & frame, structure & balance and why they are important		
	Define why reproduction is important in raising livestock		
	Explain the difference between a roughage, concentrate and supplement.		
	List 5 basic classifications of nutrients		
	Define a monogastric animal		
	Describe the different nutritional needs of a monogastric and a ruminant animal		
	Explain why it is important to have a fresh, clean source of water		
	Explain the purpose of a feed label		
	Describe Average Daily Gain		
	List the two types of digestive systems found in most domestic farm animals		
	List 3 things you can do to prevent your animal from getting diseases		
	Describe at least 5 symptoms/behaviors of a healthy animal		
	Tell why recordkeeping is important in disease prevention		
	Explain what external parasites are		
	Describe what you will need to do to be ready to show your animal		
	Prepare a list of livestock equipment & supplies needed at a Fair		
	Watch a Showmanship video and demonstrate proper showmanship techniques		
	Describe how to properly care for your animal at the fair		
	Make a list of animal science related careers		
	Prepare a thank you card to be used to thank a sponsor		
	Discuss why you need to know how much it costs to raises an animal in 4-H		



[QA]	Describe what Quality Assurance means to you		
(QA)	Describe proper animal handling		
(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)	Tell the difference between wholesale and retail cuts of meat		
[QA]	Describe where vaccinations should be given on your animal		
[QA]	Name 3 things you can do to minimize external parasites on your animal		
[QA]	Describe an animal by-product		
[QA]	Define medication withdrawal time		
(QA)	Describe Biosecurity		
(QA)	Define what ethics and sportsmanship have to do with raising and showing livestock		

<b>LEVEL 2</b>		<b>Completed (mm/dd/yy)</b>	<b>Leader's Initials</b>
	Explain impact of temperature extremes (hot & cold), wind and humidity on livestock performance		
	Describe what steps can be taken to minimize odors from manure.		
	Identify at least 3 problems created by insufficient air circulation within livestock facilities.		
	Explain the impact frame size can have on the final weight of your animal		
	List 5 things to consider when selecting a project animal		
	Tell the importance of skeletal structure in animal selection		
	Participate in a Livestock Judging activity or contest		
	Evaluate, rank and give reasons on a class of four animals		
	Describe the reproductive difference in a castrated male		
	Define the following terms: purebred, crossbred, conformation, carcass		
	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.		
	List 3 major parts of the male reproductive system		
	Describe how nutritional requirements vary based on animal's stage of growth or production.		
	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.		
	List 7 symptoms that might indicate your animal is sick		
	Explain the difference between a vaccination and a medication		
	List at least 3 internal and 2 external parasites common to your animal.		
	Describe castration, dehorning and docking		
	Demonstrate proper grooming and showmanship techniques for younger members in your group.		
	Describe where our food comes from to a friend or an adult		
	Demonstrate how to invite buyers to the market animal sale		
	Describe the animal identification options for your species		
	Describe the difference between a bill of sale, receipt and brand inspection		
(QA)	List the applicable USDA Quality and/or Yield Grades for your species		
(QA)	List at least 6 pieces of information found on a medication label.		
(QA)	Name the six pillars of characters		
(QA)	List 10 examples of by-products derived from your species of animal.		
[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)	Describe the industry standards for your species of animal.		
(QA)	Create a Biosecurity plan for your livestock project		
[QA]	Describe unethical behavior and why it's not acceptable in 4-H		
[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.		
	Describe the physical and economic impacts that parasites have on animal production.		
	Give a marketing/sales presentation (including buyer recruitment, appropriate thank you notes, etc.) at a club/project meeting		
	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.		
	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.		
	Develop a balanced ration for your project animal species.		
	Prepare/give a 7-10 minute presentation on nutrition at your club or group meeting		
	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		
	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		