

Spanish Fork High School 2014-2015

Don Learning Targets for

Animal Science 1

1. I can explain the role of FFA in agricultural education

- I can identify the events for the most important dates in FFA history
- I can explain the FFA motto, colors and creed
- I can label the parts of the FFA emblem
- I can examine and explain three common FFA Career Development events
- I can list and explain the FFA degree areas

2. I can explain the role of supervised agricultural experience (SAE) programs in agricultural education.

- I can describe the types of SAEs
- I can explain the following recordkeeping terminology: budget, asset, liability, net worth, capital, balance sheet, and inventory.
- I can develop a plan for a personal SAE program
- I can keep records on a personal SAE program in AET

3. I can explain the field of animal science.

- I can explain domestication and its contributions to animal agriculture.
- I can evaluate the adaptation of animals to production practices
- I can explain the meaning of binomial nomenclature
- I can state the scientific name and common names of major animal species in Utah
- I can identify common agricultural animals on the basis of breed.

4. I can select animals based upon industry standards.

- I can explain the importance of animal selection in success of production enterprises.
- I can identify major external parts of animals
- I can distinguish between proper and improper confirmation of livestock species.
- I can evaluate animals based upon observed traits and characteristics.

5. I can analyze the major animal systems.

- I can describe the structure and functions of the muscular and skeletal systems.
- I can identify the types of bones and muscle tissue.
- I can describe the structure and function of the nervous system.
- I can label the parts of a nerve.
- I can describe the structure and function of the circulatory and respiratory systems.
- I can label the parts of the heart and lungs.
- I can describe the flow of materials through the circulatory and respiratory system.
- I can describe the structure and function of the endocrine system.

- I can list the major hormones and glands involved in the endocrine system.
- I can describe the structure and function of the excretory system.
- I can demonstrate the function of the kidneys.
- I can describe the structure and function of the immune system.

6. I can apply principles of animal breeding and reproduction to gain desired offspring.

- I can describe benefits of using genetically superior animals for breeding
- I can define common terms and describe the function of reproductive organs
- I can compare estrous cycles and gestation of different species and list common signs of breeding readiness
- I can describe signs of parturition and dystocia
- I can describe the purpose and benefits of reproductive technologies

7. I can describe the use of genetics in producing or selecting quality offspring.

- I can recognize & describe the interrelationship between genetics and the environment
- I can describe and predict how traits are inherited using the punnet square
- I can compare and contrast qualitative vs. quantitative animal traits
- I can use EPD's to select quality sires
- I can compare common breeding systems used in the animal industry

8. I can apply principles of animal nutrition to ensure the proper growth, development, reproduction, and economic production of animals.

- I can identify the structure of the monogastric digestive system.
- I can summarize the flow of food through the digestive system.
- I can describe and identify the ruminant digestive system.
- I can compare and contrast the avian digestive system with non-avian digestive systems.
- I can classify animals according to their digestive system.
- I can list essential nutrients & their function
- I can classify feed types as roughage, concentrate or supplement.
- I can interpret a feed label
- I can identify factors effecting nutrition requirements in animals
- I can balance a ration using the pearson square

9. I can apply management principles for maintaining the health and well-being of agricultural animals.

- I can utilize safe practices in working with animals.
- I can analyze animal rights and animal welfare with respect to animal well-being.
- I can perform simple health checks on animals.
- I can discuss common diseases, parasites and common physiological disorders in animals.

- I can prescribe and implement prevention and treatment for animal health disorders.
- I can describe and identify zoonotic diseases
- I can identify and demonstrate the use of common animal health tools.

10. Students will examine consumer products, services, and benefits derived from the production of agricultural animals.

- I can identify and evaluate consumer products that come from agricultural animals.
- I can identify and grade wholesale and retail cuts of meat.
- I can describe the various carcass characteristics that determine meat grade.
- I can describe how milk and milk products are produced, processed and graded.
- I can identify consumer products that are derived from by-products of animal production.
- I can identify and grade poultry products, including eggs.
- I can describe the impact of food safety issues on animal production.
- I can identify benefits provided by companion animals
- I can describe the role of exotic pets in the animal industry
- I can describe the use of therapy animals

11. I can examine trends and career opportunities in the animal industry, including those related to agricultural animals.

- I can identify potential careers of interest in animal science
- I can develop a career plan to pursue a career in animal science
- I can demonstrate skills needed to apply for and get a job