Advanced Animal Science Scope and Sequence
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Unit 1: History of the Animal Science Industry, Domestication, and Production
LAB: Research World Ag
LAB: Illustrate Timeline

Unit 2: Careers in the Animal Science Industry
LAB: Research Careers in Agriculture
Guest Speakers (utilize community members in Ag if possible for student exposure)

Unit 3: Lab Safety
LAB: Safety demonstrations (goggles)
Lab safety rap
Create Safety posters for the lab
Lab safety contract and test (100% score)

Unit 4: Scientific Method
LAB: Observation versus Inference (examples, apples, elephant)
LAB: Ivory Soap
LAB: M&M Graphing

Unit 5: Animal Welfare Versus Animal Rights
Debate
LAB: Research Food Inc Rebuttal

Unit 6: Breeds of Livestock
LAB: Research breed
LAB: Create your own breed
LAB: Apocalypse decision

Unit 7: Livestock Evaluation and Grading
LAB: Chalk/paint a species of animal
LAB: Cookie Cutter
Online Resources

Unit 8: Meats and Food Safety
LAB: package, preservation, marketing, value added
LAB: Meats tasting
Unit 9: Digestion
  LAB: Create digestive tract
  LAB: Dissect quail
  LAB: Dissect digestive tract of a deer

Unit 10: Nutrition and Feeds
  LAB: Cereal
  LAB: Particles size and shape
  LAB: Trail Mix
  LAB: Pearson Square practice
  LAB: create feed and feed sack
  LAB: Banana Bread

Unit 11: Cells
  LAB: Elodia, Cheek, and Onion Cells
  LAB: Parts and observation with microscope

Unit 12: Genetics
  LAB: Have your DNA and eat it too
  LAB: Strawberry DNA Extraction
  LAB: Mitosis flip book
  LAB: Wards Mitosis Lab Kit

Unit 13: Repro and Estrus Cycle
  LAB: create male and female repro tract
  LAB: Dissect tract
  LAB: Hormone Scavenger Hunt

Unit 14: AI, Embryo Transfer, In-vitro, Palpation
  LAB: Demonstrations and practice
  Field Trip to Sexing Technologies

Unit 15: Skeletal, Muscle, and Nervous Systems
  LAB: Pasta skeletal system
LAB: Nerve Speed Test

LAB: How your skin senses

LAB: Make your own homunculus

Unit 16: Respiratory, Circulatory, and Urinary Systems

LAB: Create a heart with blood flow

LAB: Urinalysis

Unit 17: Animal health

LAB: Animal Vital Signs

LAB: Research diseases

LAB: Mastitis testing

LAB: Research parasites

Unit 18: Biotechnology

LAB: Cloning