

**CUMBERLAND COUNTY SCHOOL DISTRICT
BENCHMARK ASSESSMENT CURRICULUM PACING GUIDE**

School: High School	Subject: Agriculture-Animal Science	Grade: 9-12
Benchmark Assessment 1		
Instructional Timeline:12 Weeks		
Topic(s):Animal Science Academic Standards		
Kentucky Core Academic Standards	Learning Targets (I Can Statements)	Key Vocabulary
SPEAKING AND LISTENING	Utilize effective verbal and non-verbal communication skills	Verbal, Non Verbal Communication
	Participate in conversation, discussion, and group presentations	Communication Skills
	Communicate and follow directions/procedures	Workplace Readiness
	Communicate effectively with customers and co-workers	Effective Communication
READING AND WRITING	Locate and interpret written information	Writing Skills
	Read and interpret workplace documents	Locating Information
	Identify relevant details, facts, and specifications	Directions
	Record information accurately and completely	Note Taking
CRITICAL THINKING AND PROBLEM SOLVING	Demonstrate competence in organizing, writing, and editing using correct vocabulary, spelling, grammar, and punctuation	Vocabulary, Spelling, Grammar
	Demonstrate the ability to write clearly and concisely using industry specific terminology	Penmanship
	Utilize critical-thinking skills to determine best	Analyze reliable/unreliable sources of

<p>MATHEMATICS</p>	<p>options/outcomes</p> <p>Utilize innovation and problem-solving skills to arrive at the best solution for current situation</p> <p>Implement effective decision-making skills</p> <p>Perform basic and higher level math operations</p> <p>Solve problems using measurement skills</p> <p>Make reasonable estimates</p> <p>Use tables, graphs, diagrams, and charts to obtain or convey information</p> <p>Use deductive reasoning and problem-solving in mathematics</p>	<p>information,</p> <p>use previous experiences, implement crisis management</p> <p>Develop contingency planning</p> <p>Addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios</p> <p>Distance, Weight, Area, Volume</p> <p>Estimation</p> <p>Charts, Diagrams</p> <p>Word Problem Math</p>
<p>FINANCIAL LITERACY</p>	<p>Locate, evaluate, and apply personal financial information</p> <p>Identify the components of a budget and how one is created</p> <p>Set personal financial goals and develop a plan for achieving them</p> <p>Use financial services effectively</p> <p>Demonstrate ability to meet financial obligations</p>	<p>Financial Information</p> <p>Budget</p> <p>Goal Setting</p>
<p>INTERNET USE AND SECURITY</p>		

<p>INFORMATION TECHNOLOGY</p>	<p>Recognize the potential risks associated with Internet use</p> <p>Identify and apply Internet security practices (e.g., password security, login, logout, log off, lock computer)</p> <p>Practice safe, legal, and responsible use of technology in the workplace</p> <p>Use technology appropriately to enhance professional presentations</p> <p>Demonstrate effective and appropriate use of social media</p>	<p>Password security, Login, Logout</p> <p>Log off, Lock computer</p> <p>Internet Safety</p> <p>PowerPoint</p>
<p>TELECOMMUNICATIONS</p>	<p>Identify ways social media can be used as marketing, advertising, and data gathering tools</p> <p>Select and use appropriate devices, services, and applications to complete workplace tasks</p> <p>Demonstrate appropriate etiquette when using e-communications (e.g., cell phone, e-mail, personal digital assistants, online meetings, conference calls)</p>	<p>Marketing and Advertising</p> <p>Cell phone, e-mail</p> <p>Personal digital assistants, online meetings, conference calls</p>



CUMBERLAND COUNTY
PANTHERS

**CUMBERLAND COUNTY SCHOOL DISTRICT
BENCHMARK ASSESSMENT CURRICULUM PACING GUIDE**

School: High School	Subject: Agriculture- Animal Science	Grade: 9-12
Benchmark Assessment 2		
Instructional Timeline: 12 Weeks		
Topic(s): Animal Science-Employability Standards		
Kentucky Core Academic Standards	Learning Targets (I Can Statements)	Key Vocabulary
POSITIVE WORK ETHIC	Demonstrate enthusiasm and confidence about work and learning new tasks	Initiative, Follow Directions
	Demonstrate consistent and punctual attendance	Arrival, Trust, Verbal, Nonverbal
	Demonstrate initiative in assuming tasks	Pursue, Establish, Maintain
	Exhibit dependability in the workplace	Predictable, Reliable, Organized
	Take and provide direction in the workplace	Leadership, Attitude
	Accept responsibility for personal decisions and actions	Listen, Demonstrate, Develop
INTEGRITY	Abide by workplace policies and procedures	Professionalism, Positive Attitude, Empathy, Listen
	Demonstrate honesty and reliability	Fairness, Respect
	Demonstrate ethical characteristics and behaviors	Diversity, Values, Flexibility
	Maintain confidentiality and integrity of sensitive company information	Hygiene, Professionalism, Positive Attitude
	Demonstrate loyalty to the company	Trust, Goals, Actions, Values
SELF-REPRESENTATION	Demonstrate appropriate dress and hygiene in the workplace	Respect, Values, Hygiene, Dress Code

<p>TIME, TASK, AND RESOURCE MANAGEMENT</p>	<p>Use language and manners suitable for the workplace</p> <p>Demonstrate polite and respectful behavior toward others</p> <p>Demonstrate personal accountability in the workplace</p> <p>Demonstrate pride in work</p> <p>Plan and follow a work schedule</p> <p>Work with minimal supervision</p> <p>Work within budgetary constraints</p>	<p>Ethics, Diversity, Conduct</p> <p>Customer Service, Manners, Motive</p> <p>Communicate, Leadership, Communication</p> <p>Ownership</p> <p>Predictability, Reliability</p> <p>Driven, Trust, Creditability</p> <p>Budgets</p>
<p>DIVERSITY AWARENESS</p>	<p>Demonstrate ability to stay on task to produce high quality deliverables on time</p> <p>Recognize diversity, discrimination, harassment, and equity</p> <p>Work well with all customers and co-workers</p> <p>Explain the benefits of diversity within the workplace</p> <p>Explain the importance of respect for feelings, values, and beliefs of others</p> <p>Identify strategies to bridge cultural/generational differences and use differing perspectives to increase overall quality of work</p>	<p>Punctual, Quality</p> <p>Diversity, Discrimination, Equality, Harassment</p> <p>Relationships</p> <p>Diversity</p> <p>Beliefs, Ethics, Values</p> <p>Cultural Differences</p>

TEAMWORK	Illustrate techniques for eliminating gender bias and stereotyping in the workplace	Stereotyping
	Identify ways tasks can be structured to accommodate the diverse needs of workers	Diverse Workers
	Recognize the challenges and advantages of a global workforce	Global Workplace
	Recognize the characteristics of a team environment and conventional workplace	Teamwork Skills
	Contribute to the success of the team	Contributions
	Demonstrate effective team skills and evaluate their importance in the workplace	Setting goals, listening, following directions, questioning, dividing work
CREATIVITY AND RESOURCEFULNESS	Contribute new ideas	Innovation
	Stimulate ideas by posing questions	Ideas, Critical Thinking
	Value varying ideas and opinions	Listening, Leadership
	Locate and verify information	Locating Information
CUSTOMER/CLIENT SERVICE	Recognize the importance of and demonstrate how to properly acknowledge customers/clients	Customer Skills
	Identify and address needs of customers/clients	Personalized Services
	Provide helpful, courteous, and knowledgeable service	Pleasant, Courteous
	Identify appropriate channels of communication with	Setting goals, listening, following directions,

<p>ORGANIZATIONS, SYSTEMS, AND CLIMATES</p>	<p>customers/clients</p> <p>Identify techniques to seek and use customer/client feedback to improve company services</p> <p>Recognize the relationship between customer/client satisfaction and company success</p> <p>Define profit and evaluates the cost of conducting business</p> <p>Identify "big picture" issues in conducting business</p> <p>Identify role in fulfilling the mission of the workplace</p> <p>Identify the rights of workers</p> <p>Recognize the chain of command, organizational flow chart system, and hierarchy of management within an organization</p>	<p>questioning, dividing work</p> <p>Verbal and Nonverbal Communication</p> <p>Customer Satisfaction</p> <p>Profit/Loss Ratio</p> <p>Big Picture</p> <p>Workplace Mission</p> <p>Adult and child labor laws and other equal employment opportunity laws</p> <p>Chain of Command</p>
<p>JOB ACQUISITION AND ADVANCEMENT</p>	<p>Recognize the importance of maintaining a job and pursuing a career</p> <p>Define jobs associated with a specific career path or profession</p> <p>Identify and seek various job opportunities</p> <p>Prepare a resume, letter of application, and job application</p> <p>Prepare for a job interview</p>	<p>Employability Skills</p> <p>Career Pathways</p> <p>Volunteerism, internships, co-op, part-time/full-time employment</p> <p>Resume, Job Application, Business Letter</p> <p>Research company, highlight personal strengths, prepare questions, set-up a mock</p>

LIFELONG LEARNING	<p>Participate in a job interview</p> <p>Explain the proper procedure for leaving a job</p> <p>Acquire current and emerging industry-related information</p> <p>Demonstrate commitment to learning as a life-long process and recognize learning opportunities</p> <p>Seek and capitalize on self-improvement opportunities</p> <p>Discuss the importance of flexible career planning and career self-management</p> <p>Employ leadership skills to achieve workplace objectives</p> <p>Recognize the importance of job performance evaluation and coaching as it relates to career advancement</p> <p>Accept and provide constructive criticism</p> <p>Describe the impact of the global economy on jobs and careers</p>	<p>interview, dress appropriately</p> <p>Two Week Notice</p> <p>Industry Information</p> <p>Life Long Learning</p> <p>Self Image</p> <p>Flexibility, Career Management</p> <p>Personal vision, adaptability, change, shared vision</p> <p>Evaluations</p> <p>Constructive Criticism</p> <p>Global Economy</p>
JOB SPECIFIC TECHNOLOGIES	<p>Identify the value of new technologies and their impact on driving continuous change and the need for life-long learning</p> <p>Research and identify emerging technologies for specific careers</p>	<p>Life Ling Learning</p> <p>Emerging Technologies</p>

HEALTH AND SAFETY	<p>Select appropriate technological resources to accomplish work</p> <p>Assume responsibility for safety of self and others</p> <p>Follow safety guidelines in the workplace</p> <p>Manage personal health and wellness</p>	<p>Technology resources</p> <p>Workplace Safety</p> <p>Workplace Safety</p> <p>Personal Wellness</p>
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PANTHERS

**CUMBERLAND COUNTY SCHOOL DISTRICT
BENCHMARK ASSESSMENT CURRICULUM PACING GUIDE**

School: High School	Subject: Agriculture-Animal Systems	Grade: 9-12
Benchmark Assessment 3		
Instructional Timeline: 12 Weeks		
Topic(s): Animal Science Occupational Standards		
Kentucky Core Academic Standards	Learning Targets (I Can Statements)	Key Vocabulary
Analyze historic and current trends impacting the animal systems industry	<p>Discuss the interrelationships between agriculture commodities based on economic, geographic, and production factors</p> <p>Analyze changes in food consumption throughout history</p> <p>Describe the relationship between consumer demands and animal production</p> <p>Evaluate current trends in animal science through industry associations, trade journals, and reliable electronic resources</p> <p>Describe agricultural practices that ensure a safe and reliable food supply</p> <p>Discuss the benefits of utilizing best practice production systems in animal science</p> <p>Evaluate the impact of world trade issues (e.g., diseases, imports/exports, drought, trade agreements) on animal science</p> <p>Summarize agricultural laws impacting animal science (e.g., property, incorporation, liability issues, animal husbandry, labor, farming in populated areas)</p>	<p>Agriculture Diversification, Biotechnology, Domestication</p> <p>Animal Consumption Trends</p> <p>Supply, Demand, Exports, Imports</p> <p>Agriculture Current Events, Farmers Pride Articles</p> <p>Food Safety</p> <p>Animal Welfare, Animal Safety, Sewerage system, Safe water</p> <p>Famines, Biology, Chemistry, Biochemistry, Entomology</p> <p>Taxes, Tariffs,</p>

	Identify related government agencies, their functions and programs, as they relate to animal science	FSA, Extension Services, NRCS
	Describe the implications of state and federal agricultural legislation (e.g., farm bill)	Farm Bill, Renewable natural resources
	Compare and contrast marketing opportunities for animal commodities (e.g., terminal, direct, niche, local)	Terminal, Auction, Internet, Group Marketing
	Analyze the benefits of risk management practices (futures, forward contracts, diversification, insurance)	Futures Markets, Risk Factors, CBOT
	Summarize the benefits of electronic technology in animal science (e.g., electronic record keeping, ultrasound, electronic)	Biotechnology, Computer Usage
Utilize best-practice protocols based on animal behaviors for animal husbandry and welfare	Describe characteristics of effective animal care facilities	Handling Facilities
	Recommend safe handling techniques and equipment when working with animals	Animal Handling Equipment
	Differentiate between animal welfare and animal rights	Animal Safety Practices
Design and provide proper animal nutrition to achieve desired outcomes for performance development, reproduction, and/or economic	Describe the anatomy and physiology of digestive systems (monogastric, ruminant, hind gut fermenters, avian)	Ruminant, Nonruminant
	Discuss the function of the six classes of nutrients in regards to animal nutrition	Animal Feeds, Nutrition, Rations
	Compare common types of feedstuffs and the role	Animal Feed Stuffs

<p>Apply principles of animal reproduction to achieve desired outcomes for performance, development, and economic production</p>	<p>they play in the diets of animals</p> <p>Explain the purpose of feed additives and growth promotants in animal production</p> <p>Formulate animal feeds based on nutritional requirements using feed ingredients for maximum nutrition and optimal economic</p> <p>Describe the functions of major reproductive organs and hormones in the male and female reproductive systems</p> <p>Contrast the processes of natural and artificial breeding methods</p> <p>Infer how age, size, life cycle, maturity level, gestation, and health status affect the reproductive efficiency of male and female animals</p> <p>Evaluate the use of quantitative breeding values in the selection of genetically superior breeding stock</p> <p>Discuss the importance of efficient and economic reproduction in animals</p> <p>Differentiate principles of animal genetics and heredity</p> <p>Appraise the advantages of reproductive management practices</p>	<p>Animal Implants</p> <p>Balanced Feed Rations</p> <p>Animal Reproduction Methods</p> <p>AI, ET, Natural Mating</p> <p>Seasonal Breeders, Gestation Periods, Dystocia</p> <p>EPDs, Animal Pedigees, Selective Breeding</p> <p>Natural Mating</p> <p>Homozygous, Heterozygous, Phenotype, Genotype, Dominance, Recessive</p> <p>Estrous Synchronization, Super ovulation, Flushing, and Embryo transfer</p>
<p>Evaluate environmental factors affecting animal performance and</p>	<p>Select best practices to enhance soil and water quality</p>	<p>Soil, Water</p>

<p>implement procedures for enhancing performance and animal health</p>	<p>Describe the impact of water quality on animal health</p>	<p>Water Quality, Animal Health</p>
<p>Classify, evaluate and select animals based on anatomical and physiological characteristics</p>	<p>Describe procedures to decrease the negative effects of environmental factors on animals</p> <p>Evaluate measures to maintain the quality of the environment in areas used to raise and house animals</p> <p>Classify animals according to the taxonomical classification system and species-specific terminology related to age and gender</p> <p>Differentiate major animal breeds within the industry and their production strengths</p> <p>Identify the major skeletal and external parts of production and companion species</p> <p>Identify wholesale and retail cuts of production species</p> <p>Evaluate desirable anatomical and physiological characteristics of animals within and between species</p>	<p>Animal Environmental Effects</p> <p>Companion Animals</p> <p>Livestock Husbandry</p> <p>Animal Breeds</p> <p>External Parts</p> <p>Retail Cuts of Meat</p> <p>Anatomical and Physiological</p>
<p>Apply principles of effective animal health care</p>	<p>Characterize common disorders, parasites, and vaccinated diseases of both production and companion animal species</p> <p>Discuss the health risks of zoonotic diseases to humans and their historical significance</p> <p>Select proper medical dosages and delivery methods</p>	<p>Diseases and Parasites</p> <p>Mad Cow Disease</p> <p>Intramuscular, Intravenous, Subcutaneous, Drench, Pour-on</p>

Practice Sound Agricultural Finance in Animal Science	Evaluate preventative measures for controlling and limiting the spread of diseases, parasites, and disorders among animals	Livestock Management
	Explain common surgical and nonsurgical procedures in animal healthcare	Surgical and non surgical Procedures
	Identify requirements for and sources of credit	Lending, APR
	Compare the benefits related to buying, leasing, renting land and/or equipment	Leasing vs. Renting
	Describe how various forms of taxes impact the animal science industry	Income, Sales, Property, Inheritance
Calculate break-even prices in an animal science business to maximize profit	Break-even	



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