

A Correlation of **Realityworks**
Agriculture/Trades Curricula to the
Common Career Technical Core Standards



INTRODUCTION

This alignment document demonstrates how the Realityworks Agriculture curricula used with Realityworks simulators, task trainers, and models meet the objectives of the *Common Career Technical Core Standards* as listed in this document as well as the overarching set of Career Ready Practices listed in this document. Correlations are cited by curriculum.

The agriculture curricula are standards-based programs designed to be used with, and to enhance the educational value of the accompanying simulators, task trainers, and models. Each curriculum contains a Teacher Guide with detailed active learning lesson plans, slide presentations, and student materials. These agriculture curricula were reviewed for alignment to the Common Career Technical Core Standards.

**Correlation of Realityworks Agriculture/Trades
Curricula to the Common Career Technical Core
Standards**

Agribusiness Systems Career Pathway (AG-BIZ)	
Common Career Technical Core Standards	Realityworks Agriculture Curricula
1. Apply management planning principles in AFNR business enterprises.	Animal Clinic Design Kit
2. Use record-keeping to accomplish AFNR business objectives, manage budgets, and comply with laws and regulations.	N/A
3. Manage cash budget, credit budgets, and credit for an AFNR business using generally accepted accounting principles.	N/A
4. Develop a business plan for an AFNR enterprise or business unit.	N/A
5. Use sales and marketing principles common to agribusiness systems to accomplish AFNR business objectives.	N/A

Animal Systems Career Pathway (AG-ANI)	
Common Career Technical Core Standards	Realityworks Agriculture Curricula
1. Analyze historic and current trends impacting the animal systems industry.	Introduction to Bovine Fetal Development Butcher Beef Cuts Cow Anatomy Pig Anatomy Dissected Fetal Pig Horse Anatomy Chicken Anatomy Sheep Anatomy Goat Anatomy Large Dog Anatomy Small Dog Anatomy Cat Anatomy Rabbit Anatomy Ruminant Digestive System

	Horse Digestive System Pig Digestive System Cow Reproductive System Horse Reproductive System Pig Reproductive System
2. Utilize best practice protocols for husbandry and welfare based upon animal behaviors.	Calf Systems Introduction to Bovine Fetal Development Butcher Beef Cuts Cow Anatomy Pig Anatomy Dissected Fetal Pig Horse Anatomy Chicken Anatomy Sheep Anatomy Goat Anatomy Large Dog Anatomy Small Dog Anatomy Cat Anatomy Rabbit Anatomy Ruminant Digestive System Horse Digestive System Pig Digestive System Cow Reproductive System Horse Reproductive System Pig Reproductive System Bovine Injection Introduction to Swine Litter Processing Animal Clinic Design Kit Introduction to Bovine Birthing and Ultrasound Techniques Canine Vet Trainer Beef Cattle Kit Swine Kit Chicken Kit Bovine Milking Udder Bovine AI Cervix

3. Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction, and/or economic production.	Beef Cattle Kit Swine Kit Chicken Kit Introduction to Bovine Fetal Development Butcher Beef Cuts Cow Anatomy Pig Anatomy Dissected Fetal Pig Horse Anatomy Chicken Anatomy Sheep Anatomy Goat Anatomy Large Dog Anatomy Small Dog Anatomy Cat Anatomy Rabbit Anatomy Ruminant Digestive System Horse Digestive System Pig Digestive System Cow Reproductive System Horse Reproductive System Pig Reproductive System
4. Apply principles of animal reproduction given desired outcomes for performance, development, and/or economic production.	Introduction to Bovine Fetal Development Butcher Beef Cuts Cow Anatomy Pig Anatomy Dissected Fetal Pig Horse Anatomy Chicken Anatomy Sheep Anatomy Goat Anatomy Large Dog Anatomy Small Dog Anatomy Cat Anatomy Rabbit Anatomy Ruminant Digestive System Horse Digestive System Pig Digestive System

	Cow Reproductive System Horse Reproductive System Pig Reproductive System Beef Cattle Kit Swine Kit Chicken Kit Introduction to Bovine Birthing and Ultrasound Techniques Introduction to Swine Litter Processing
5. Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.	Animal Clinic Design Kit Canine Vet Trainer Food Science and Nutrition Beef Cattle Kit Swine Kit Chicken Kit
6. Classify, evaluate, and select animals based on anatomical and physiological characteristics.	Beef Cattle Kit Swine Kit Chicken Kit Introduction to Bovine Fetal Development Cow Anatomy Pig Anatomy Dissected Fetal Pig Horse Anatomy Chicken Anatomy Sheep Anatomy Goat Anatomy Large Dog Anatomy Small Dog Anatomy Cat Anatomy Rabbit Anatomy Ruminant Digestive System Horse Digestive System Pig Digestive System Cow Reproductive System Horse Reproductive System Pig Reproductive System Butcher Beef Cuts Butcher Pork Cuts
7. Apply principles of effective animal health care.	Animal Clinic Design Kit Canine Vet Trainer

	Calf Systems Introduction to Swine Litter Processing Cow Reproductive System Pig Reproductive System Introduction to Bovine Birthing and Ultrasound Techniques Bovine AI Cervix
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Environmental Service Systems Pathways (AG-ENV)	
Common Career Technical Core Standards	Realityworks Agriculture Curricula
1. Use analytic procedures and instruments to manage environmental systems activities.	Introduction to Hydroponics
2. Evaluate the impact of public policies and regulations on environmental services facility operations.	Introduction to Hydroponics
3. Develop proposed solutions to environmental issues, problems, and applications using scientific principles of meteorology, soil science, hydrology, microbiology, chemistry, and ecology.	Introduction to Hydroponics

Food Products and Processing Systems (AG-FD)	
Common Career Technical Core Standards	Realityworks Agriculture Curricula
1. Develop and implement procedures to ensure safety, sanitation, and quality in food product and processing facilities.	Introduction to Hydroponics Butcher Beef Cuts Butcher Pork Cuts Food Science and Nutrition
2. Apply principles of nutrition, biology, microbiology, chemistry, and human behavior to development of food products.	Introduction to Hydroponics Butcher Beef Cuts Butcher Pork Cuts Food Science and Nutrition
3. Select and process food products for storage, distribution, and consumption.	Introduction to Hydroponics Butcher Beef Cuts Butcher Pork Cuts Food Science and Nutrition
4. Explain the scope of the food industry and the historical and current developments of food products and processing.	N/A

Natural Resources Systems (AG-NR)	
Common Career Technical Core Standards	Realityworks Agriculture Curricula
1. Plan and conduct natural resource management activities that apply logical, reasoned, and scientifically based solutions to natural resource issues and goals.	N/A
2. Plan and analyze interrelationships between natural resources and humans needed to manage natural resource systems.	N/A
3. Develop plans to ensure responsible and sustainable production and processing of natural resources.	N/A
4. Demonstrate Responsible control and management procedures and techniques to protect or maintain natural resources.	N/A

Plant Systems (AG-PL)	
Common Career Technical Core Standards	Realityworks Agriculture Curricula
1. Develop and implement a crop management plan for a given production goal that accounts for environmental factors.	Introduction to Hydroponics Plant Science Basics Soybean Plant Model Corn Stalk
2. Apply the principles of classification, plant anatomy, and plant physiology to plant production and management.	Introduction to Hydroponics Plant Science Basics Soybean Plant Model Corn Stalk
3. Propagate, culture, and harvest plants and plant products based on current industry standards.	Introduction to Hydroponics Plant Science Basics Soybean Plant Model Corn Stalk
4. Apply principles of design in plant systems to enhance an environment (e.g. floral, forest landscape, and farm).	Introduction to Hydroponics

Power, Structural, and Technical Systems (AG-PST)	
Common Career Technical Core Standards	Realityworks Agriculture/Trades Curricula
1. Apply physical science principles and engineering applications related to mechanical equipment, structures, and biological systems to solve problems and improve performance in AFNR power, structural, and technical systems.	RC Tractor Pull Challenge RealCareer™ Electrical Wiring Kit guideWELD® VR guideWELD LIVE RealCareer Weld Defects Kit Common Welding Joints Kit
2. Operate and maintain mechanical equipment related to AFNR power, structural and technical systems.	RC Tractor Pull Challenge RealCareer Electrical Wiring Kit guideWELD VR guideWELD LIVE
3. Service and repair mechanical equipment and power systems used in AFNR power, structural, and technical systems.	RC Tractor Pull Challenge RealCareer Electrical Wiring Kit guideWELD VR guideWELD LIVE
4. Plan, build, and maintain AFNR structures.	RealCareer Electrical Wiring Kit guideWELD VR guideWELD LIVE
5. Use control, monitoring, geospatial, and other technologies in AFNR power, structural, and technical systems.	RC Tractor Pull Challenge RealCareer Electrical Wiring Kit guideWELD VR guideWELD LIVE