

# Agriculture Curricula Overview

Realityworks curricula come with lesson plans, presentation slides, assessments, and other student materials.

Experiential Learning Tools	Curriculum Length	Lesson Topics
Animal Clinic Design Kit	4 lesson hours	<ul style="list-style-type: none"> <li>• Career as a Veterinary Technician</li> <li>• Animal Welfare Act and Animal Care</li> <li>• Best Practices and Design Options for Animal Clinic Design</li> </ul>
Beef Cattle Kit	7 lesson hours	<ul style="list-style-type: none"> <li>• Breeds</li> <li>• Feeding and Management</li> <li>• Diseases and Parasites</li> <li>• Reproduction</li> <li>• Body Systems</li> <li>• Selection and Judging</li> <li>• Intro to Careers in Beef Production</li> </ul>
Bovine AI Cervix Kit	2-3 lesson hours	<ul style="list-style-type: none"> <li>• Cow and Bull Reproductive Systems</li> <li>• Basic Principles of AI</li> <li>• AI Technique</li> </ul>
Bovine Birthing and Ultrasound Simulator	4 lesson hours	<ul style="list-style-type: none"> <li>• Calving Stages and Care</li> <li>• Common Calving Problems</li> <li>• Embryology and Development</li> <li>• Ultrasound</li> </ul>
Bovine Breeder artificial insemination simulator	3-5 lesson hours	<ul style="list-style-type: none"> <li>• Cow and Bull Reproductive Systems</li> <li>• Basic Principles of AI</li> <li>• AI Technique</li> <li>• Pregnancy Palpation</li> </ul>
Bovine Fetal Development Models	1-2 lesson hours	<ul style="list-style-type: none"> <li>• Growth Stages of a Fetal Calf</li> </ul>
Bovine Injection Simulator	2 lesson hours	<ul style="list-style-type: none"> <li>• Bovine Injections</li> <li>• Bovine Growth Implants</li> </ul>
Bovine Milking Udder Simulator	4 lesson hours	<ul style="list-style-type: none"> <li>• Development of the Bovine Udder</li> <li>• Structure of the Bovine Udder</li> <li>• Milking Procedure</li> <li>• Managing Somatic Cell Counts</li> </ul>
Butcher Beef Cut Models	3-4 lesson hours	<ul style="list-style-type: none"> <li>• Beef Cattle Anatomy</li> <li>• Cattle Harvesting Procedures</li> <li>• Beef Carcass Fabrication</li> </ul>

Experiential Learning Tools	Curriculum Length	Lesson Topics
Butcher Lamb Cut Models	<i>4-5 lesson hours</i>	<ul style="list-style-type: none"> <li>• Sheep Anatomy and Lamb Carcass Evaluation</li> <li>• Lamb Carcass Fabrication</li> <li>• Retail Cuts Fabrication and Cookery</li> </ul>
Butcher Pork Cut Models	<i>4-5 lesson hours</i>	<ul style="list-style-type: none"> <li>• Pork Anatomy and Fabrication</li> <li>• Pork Harvesting Process</li> <li>• Pork Retail Cut Fabrication and Cookery</li> </ul>
Calf Simulator	<i>4-5 lesson hours</i>	<ul style="list-style-type: none"> <li>• Animal Health Assessment</li> <li>• Esophageal Feeding</li> <li>• Navel Care and Castration</li> <li>• Tail Vein Injections and Blood Draws</li> </ul>
Canine Vet Trainer	<i>3 lesson hours</i>	<ul style="list-style-type: none"> <li>• Basic Canine Anatomy</li> <li>• Veterinary Technician Skills</li> <li>• Bladder Issues, Palpation, and Urinary Catheterization in Dogs</li> </ul>
Cat Model	<i>4 lesson hours</i>	<ul style="list-style-type: none"> <li>• Cat Anatomy and the Five Senses</li> <li>• Cat Digestive and Urinary Systems</li> <li>• Cat Reproductive System</li> <li>• Cat Respiratory and Circulatory Systems</li> </ul>
Chicken Kit	<i>7 lesson hours</i>	<ul style="list-style-type: none"> <li>• Breeds</li> <li>• Feeding and Management</li> <li>• Diseases and Parasites</li> <li>• Reproduction</li> <li>• Body Systems</li> <li>• Selection and Judging</li> <li>• Marketing, Careers, and Training</li> </ul>
Chicken Model	<i>1 lesson hour</i>	<ul style="list-style-type: none"> <li>• Understanding Poultry Anatomy</li> </ul>
Corn Stalk Model	<i>1 lesson hour</i>	<ul style="list-style-type: none"> <li>• Corn Stalk Anatomy</li> <li>• Common Nutrient Deficiencies</li> </ul>
Cow Anatomy 3D Flip Chart	<i>3 lesson hours</i>	<ul style="list-style-type: none"> <li>• Beef and Dairy Cow Anatomy</li> <li>• Ruminant Digestive Tract</li> <li>• Cow and Bull Reproductive Systems</li> </ul>
Cow and Pig Ear Simulation	<i>2 lesson hours</i>	<ul style="list-style-type: none"> <li>• Cow Ear Tagging</li> <li>• Pig Ear Notching</li> </ul>

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Cat Kit	<i>7 lesson hours</i>	<ul style="list-style-type: none"> <li>• Breeds</li> <li>• Feeding and Management</li> <li>• Diseases and Parasites</li> <li>• Reproduction</li> <li>• Body Systems</li> <li>• Selection and Judging</li> <li>• Careers and Training</li> </ul>
Cow Model	<i>3 lesson hours</i>	<ul style="list-style-type: none"> <li>• Beef and Dairy Cow Anatomy</li> <li>• Ruminant Digestive Tract</li> <li>• Cow and Bull Reproductive Systems</li> </ul>
Cow Uterus Model	<i>1 lesson hour</i>	<ul style="list-style-type: none"> <li>• Cow and Bull Reproductive Systems</li> </ul>
Dissected Fetal Pig	<i>1 lesson hour</i>	<ul style="list-style-type: none"> <li>• Dissected Fetal Pig Anatomy</li> </ul>
Dog Kit	<i>7 lesson hours</i>	<ul style="list-style-type: none"> <li>• Breeds</li> <li>• Feeding and Management</li> <li>• Diseases and Parasites</li> <li>• Reproduction</li> <li>• Body Systems</li> <li>• Selection and Judging</li> <li>• Careers and Training</li> </ul>
Dog Model	<i>3 lesson hours</i>	<ul style="list-style-type: none"> <li>• Dog Anatomy and Physiology</li> <li>• Dog Digestive Tract</li> <li>• Dog Reproductive System</li> </ul>
Farm to Fork Lab Kit	<i>7 lesson hours</i>	<ul style="list-style-type: none"> <li>• Production of Goods</li> <li>• Processing Agricultural Products</li> <li>• Transporting Food to a Regional Distribution Center</li> <li>• Shipping Produce to Local Retail Stores</li> <li>• Food Ending Up on Your Plate</li> </ul>
Goat Kit	<i>7 lesson hours</i>	<ul style="list-style-type: none"> <li>• Breeds</li> <li>• Feeding and Management</li> <li>• Diseases and Parasites</li> <li>• Reproduction</li> <li>• Body Systems</li> <li>• Selection and Judging</li> <li>• Goat Production Careers and Training</li> </ul>
Goat Model	<i>3 lesson hours</i>	<ul style="list-style-type: none"> <li>• Goat Anatomy</li> <li>• Goat Digestive Tract</li> <li>• Goat Reproductive Systems</li> </ul>

Experiential Learning Tools	Curriculum Length	Lesson Topics
Horse Kit	<i>7 lesson hours</i>	<ul style="list-style-type: none"> <li>• Breeds</li> <li>• Feeding and Management</li> <li>• Diseases and Parasites</li> <li>• Reproduction</li> <li>• Body Systems</li> <li>• Selection and Judging</li> <li>• Careers and Training</li> </ul>
Horse Model	<i>3 lesson hours</i>	<ul style="list-style-type: none"> <li>• Horse Anatomy</li> <li>• Horse Digestive System</li> <li>• Horse Reproductive Systems</li> </ul>
Horse Stomach Model	<i>1 lesson hour</i>	<ul style="list-style-type: none"> <li>• Horse Digestive System</li> </ul>
Horse Uterus Model	<i>1 lesson hour</i>	<ul style="list-style-type: none"> <li>• Horse Reproductive System</li> </ul>
Pig Model	<i>3 lesson hours</i>	<ul style="list-style-type: none"> <li>• Pig Anatomy and Pork Cuts</li> <li>• Pig Digestive Tract</li> <li>• Pig Reproductive Systems</li> </ul>
Pig Stomach Model	<i>1 lesson hour</i>	<ul style="list-style-type: none"> <li>• Pig Digestive Tract</li> </ul>
Pig Uterus Model	<i>1 lesson hour</i>	<ul style="list-style-type: none"> <li>• Pig Reproductive Systems</li> </ul>
Plant Lab, Mini, and Plant Producer Educational Hydroponics Systems	<i>2 lesson hours</i>	<ul style="list-style-type: none"> <li>• Introduction to Hydroponics</li> <li>• Plant Life</li> </ul>
Plant Science Kit	<i>10-14 lesson hours</i>	<ul style="list-style-type: none"> <li>• Introduction to Plant Science</li> <li>• Plant Cell Structure</li> <li>• Leaves, Roots, and Stems</li> <li>• Flowering Plants</li> <li>• Plant Identification Features</li> <li>• Photosynthesis, Respiration, and Transpiration</li> <li>• Exploring Botany and Plant Science Careers</li> </ul>
Rabbit Model	<i>1 lesson hour</i>	<ul style="list-style-type: none"> <li>• Basic Anatomy of a Rabbit</li> </ul>

<b>Experiential Learning Tools</b>	<b>Curriculum Length</b>	<b>Lesson Topics</b>
RC Tractor Pull Challenge (5-pack) with Pulling Sled	5-7 lesson hours	<ul style="list-style-type: none"> <li>• Understanding Force and Motion</li> <li>• The Work of Friction and Gravity</li> <li>• Gear Ratios and Traction With Tires</li> <li>• Acceleration and Sled Pulling</li> <li>• Tractor Pulling and Distance Pulling</li> </ul>
Ruminant Model	1 lesson hour	<ul style="list-style-type: none"> <li>• Ruminant Digestive Tract</li> </ul>
Sheep Kit	7 lesson hours	<ul style="list-style-type: none"> <li>• Breeds</li> <li>• Feeding and Management</li> <li>• Diseases and Parasites</li> <li>• Reproduction</li> <li>• Body Systems</li> <li>• Selection and Judging</li> <li>• Marketing, Careers, and Training</li> </ul>
Sheep Model	3 lesson hours	<ul style="list-style-type: none"> <li>• Sheep Anatomy</li> <li>• Sheep Digestive Tract</li> <li>• Sheep Reproductive Systems</li> </ul>
Soil Monolith Kit	2-3 lesson hours	<ul style="list-style-type: none"> <li>• Soil Horizons</li> <li>• Soil Orders</li> </ul>
Soybean Plant Model	2 lesson hours	<ul style="list-style-type: none"> <li>• Soybean Plant Anatomy</li> <li>• Soybeans Plant Growth Stages</li> </ul>
Suture Kit	1 lesson hour	<ul style="list-style-type: none"> <li>• Suturing Basics</li> </ul>
Swine Breeder™ artificial insemination simulator	3-4 lesson hours	<ul style="list-style-type: none"> <li>• Swine Reproductive Systems</li> <li>• Basic Principals of Swine A.I. Techniques</li> <li>• Farrowing and Birthing Issues</li> </ul>
Swine Kit	7 lesson hours	<ul style="list-style-type: none"> <li>• Breeds</li> <li>• Feeding and Management</li> <li>• Diseases and Parasites</li> <li>• Reproduction</li> <li>• Body Systems</li> <li>• Selection and Judging</li> <li>• Marketing, Careers, and Training</li> </ul>
Swine Litter Processing Simulators	2 lesson hours	<ul style="list-style-type: none"> <li>• Management Practices in Swine Production</li> <li>• Demonstrating in Litter Processing</li> </ul>