Hamilton Heights School Corporation
7th/8th Grade Agri Science Year 1 Curriculum Map

Course Title: 7th/8th Grade Agri Science	Quarter 1	Academic Year: 2025-2026

Essential Questions
How does Agriculture relate to everyday life?
What is the importance of agriculture to the economy?
What agricultural career opportunities exist?

Unit Name	Total Days	Standards Number	Knowledge Objectives	Skills Objectives	Specific Assessments	Specific Resources
Why Agriculture?	2	EA-9.1	• Nature and scope of agriculture in society	Identify ways agriculture relates to your life	Classroom Expectations Review Source Search Game	Classroom Expectations Sheet Ag in the Classroom - Source Search Lesson
Food Preservation & Prepareation	9	EA-7.1 EA-9.1	• Explore how foods are grown & processed • Explore the scope of agriculture in society Vocabulary: Preserve, Prepare, Process,	Describe and compare various methods of food preservation	Make pickles with given recipe Food Storage and Preparation Knowledge Check	Pickle Recipe Ag in the Classroom - Fruits and Vegetables: The Right Pick for Vitamins and Minerals EdPuzzle: Mt. Olive Pickles Virtual Tour

			Produce, Fresh/Raw, Freezing, Pickling, Canning, Drying, Steaming, Microwaving, Farm to Fork			
Plant Science	11	EA-3.1 EA-3.3 EA-9.2	• Basic plant structure • Basic plant growth needs Vocabulary: Photosynthesis, stem, roots, leaves, seed, flower, fruit, vegetable, capillary action, root pressure, transpiration, greenhouse	Use STEM/Engineering Design Process to explore plant needs and plant structures	Greenhouse STEM Challenge Capillary Action STEM Challenge	Greenhouse STEM Challenge Capillary Action STEM Challenge Capillary Action in the WonderLab Capillary Action in Action EdPuzzles Jeopardy Review Game
Farm to Fork	20	EA-5.3 EA-5.4 EA-7.1 EA-9.3	• Explain common uses of livestock • Identify common species and breeds of livestock • Explore how various foods are grown and	Describe the purpose of dairy cattle breeds Identify 5 breeds of dairy cattle Describe the Farm to Fork	Create an advertisement for a new dairy breed Cheese Making Process Choice Board Farm to Fork/Dairy	AgExplore Culver's Farm to Fork Lesson Plans including worksheets & virtual tour Dairy Cattle Blookets Dairy Cattle Gimkits

			produced through the farm to plate process. • Explore those qualities, attributes, and skills necessary to succeed in a chosen agricultural career Vocabulary: Dairy Cattle, Dairy Breeds - Holstein, Jersey, Brown Swiss, Ayrshire, Guernsey, Custard vs. Ice Cream, Creamery, Farm to Fork, Curds, Whey, Rennet, Pasturization, Homogenization, Starter Cultures (bacteria)	process of dairy products	Knowledge Check	Traders Point Creamery Field Trip EdPuzzle: Farm Tour - Bees & Dairy Cattle Cheese Making Video & Worksheet Cheese Making Lab Cheese Making EdPuzzle Chocolate Making EdPuzzle Cheese Making Choice Board & Rubric Jeopardy Review Game

Course Title: 7th/8th Grade Agri Science	Quarter 2	

Essential Questions
How does Agriculture relate to everyday life?
What is the importance of agriculture to the economy?
What agricultural career opportunities exist?

Animal Science	10	EA-5.1 EA-5.3 EA-5.4	• Common uses of animals • Common species and/or breeds of livestock • Livestock related careers Vocabulary: Rabbitry, Buck, Doe, Kit, Boar, Sow, Piglet	Identify common uses of rabbits Identify 5 common rabbit breeds Identify 5 common breeds of swine Explore careers in the swine industry	Rabbit Knowledge Check Swine Careers Project	4-H Leaders Guide, Canada 4-H Indiana 4-H Rabbit Project Manual Guest Speaker with live animals RealityWorks Slides presentations RealityWorks Guided Notes EdPuzzle
Power, Structure, and Technical Systems	4-6	EA-8.1	• Recognize and apply safety principles as they relate to Ag and everyday life. Vocabulary: Hazardous, Fatality, Safety Features, Safety Precautions, Operator, Fatigue	Identity basic hand tools Identify uses of basic hand tools Apply shop safety principles to everyday life	Bird Feeder	Bird Feeder Plans

Essential Questions
How does Agriculture relate to everyday life?
What is the importance of agriculture to the economy?
What agricultural career opportunities exist?

Unit Name	Total Days	Standards Number	Knowledge Objectives	Skills Objectives	Specific Assessments	Specific Resources
Why Agriculture?	2	EA-9.1	• Nature and scope of agriculture in society	Identify ways agriculture relates to your life	Classroom Expectations Review Source Search Game	Classroom Expectations Sheet Ag in the Classroom - Source Search Lesson
Plant Science	11	EA-3.1 EA-3.3 EA-9.2	• Basic plant structure • Basic plant growth needs • Identify basic soil properties Vocabulary: Photosynthesis, stem, roots, leaves, seed, flower, fruit, vegetable, capillary action, root pressure, transpiration, greenhouse, Horizons, Clay, Sand, Silt, Bedrock, Parent Material, Subsoil, Topsoil,	Use STEM/Engineering Design Process to explore plant needs and plant structures Identify 5 soil layers Identify 3 soil particles	Greenhouse STEM Challenge Capillary Action STEM Challenge Edible soil lab Soil Science Knowledge Check	Greenhouse STEM Challenge Capillary Action STEM Challenge Capillary Action in the WonderLab Capillary Action in Action EdPuzzles

			Organic Matter			Jeopardy Review Game
Food Preservation & Prepareation	9	EA-7.1 EA-9.1	• Explore how foods are grown & processed • Explore the scope of agriculture in society Vocabulary: Preserve, Prepare, Process, Produce, Fresh/Raw, Freezing, Pickling, Canning, Drying, Steaming, Microwaving, Farm to Fork	Describe and compare various methods of food preservation	Make pickles with given recipe Food Storage and Preparation Knowledge Check	Pickle Recipe Ag in the Classroom - Fruits and Vegetables: The Right Pick for Vitamins and Minerals EdPuzzle: Mt. Olive Pickles Virtual Tour
Animal Science	10	EA-5.1 EA-5.3 EA-5.4	• Common uses of animals • Common species and/or breeds of livestock • Livestock related careers Vocabulary: Boar, Sow, Piglet, Swine, Digestion, Monogastric Digestive System, Mouth,	Identify 5 common breeds of swine Explore careers in the swine industry	Swine Careers Project	RealityWorks Slides presentations RealityWorks Guided Notes EdPuzzle RealityWorks 3D Pig Model

			Stomach, Esophagus, Small Intestine, Large Intestine, Anus			

Course Title: 7th/8th Grade Agri Science	Quarter 4	

Essential Questions How does Agriculture relate to everyday life? What is the importance of agriculture to the economy? What agricultural career opportunities exist?						
Animal Science	10	EA-5.1 EA-5.3 EA-5.4	• Common uses of animals • Common species and/or breeds of livestock • Livestock related careers Vocabulary: Rabbitry, Buck, Doe, Kit	Identify common uses of rabbits Identify 5 common rabbit breeds	Rabbit Knowledge Check	4-H Leaders Guide, Canada 4-H Indiana 4-H Rabbit Project Manual Guest Speaker with live animals
Farm to Fork	20	EA-5.3 EA-5.4 EA-7.1 EA-9.3	• Explain common uses of livestock • Identify common species and breeds	Describe the purpose of dairy cattle breeds Identify 5 breeds of dairy	Create an advertisement for a new dairy breed Cheese Making Process	AgExplore Culver's Farm to Fork Lesson Plans including worksheets & virtual tour

			of livestock ● Explore how various foods are grown and produced through the farm to plate process. ● Explore those qualities, attributes, and skills necessary to succeed in a chosen agricultural career Vocabulary: Dairy Cattle, Dairy Breeds - Holstein, Jersey, Brown Swiss, Ayrshire, Guernsey, Custard vs. Ice Cream, Creamery, Farm to Fork, Curds, Whey, Rennet, Pasturization, Homogenization, Starter Cultures (bacteria)	cattle Describe the Farm to Fork process of dairy products	Choice Board Farm to Fork/Dairy Knowledge Check	Dairy Cattle Blookets Dairy Cattle Gimkits Traders Point Creamery Field Trip EdPuzzle: Farm Tour - Bees & Dairy Cattle Cheese Making Video & Worksheet Cheese Making Lab Cheese Making EdPuzzle Chocolate Making EdPuzzle Cheese Making Choice Board & Rubric Jeopardy Review Game
Power, Structure, and Technical Systems	4-6	EA-8.1	● Recognize and apply safety principles as they relate to Ag and everyday life.	Identity basic hand tools Identify uses of basic hand tools	Bird Feeder	Bird Feeder Plans

			Vocabulary: Hazardous, Fatality, Safety Features, Safety Precautions, Operator, Fatigue	Apply shop safety principles to everyday life		