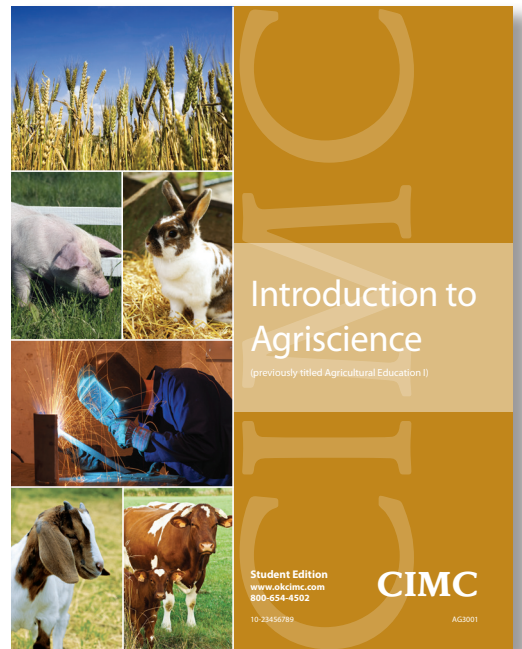


Introduction to Agriscience

Curriculum Crosswalk

- National Agriculture, Food and Natural Resources (AFNR) Career Cluster Content Standards
- Oklahoma Academic Standards



*career*tech

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Unit Objectives	Activity Number(s)	Oklahoma Academic Standard(s)	National AFNR Career Cluster Standard(s)
Unit 1 – Career Opportunities in Agriculture			
Discuss career cluster and pathways.	1.2	Grade 9 Language Arts Reading/Literature: 4.1.a, 4.2.c	CS.02.03.01.a CS.02.03.03.a
Determine the steps to setting career goals.	1.4, 1.8	Grade 9 Language Arts Reading/Literature: 4.1.a, 4.2.c	CS.02.03.01.a CS.02.03.03.a
Examine the degree requirements, salary and job availability of various careers in agriculture.	1.4, 1.5, 1.6	Grade 9 Language Arts Reading/Literature: 4.1.a, 4.2.c	CS.02.03.01.a CS.02.03.03.a
Determine your interests and skills as they relate to careers.	1.3, 1.4, 1.6, 1.8	Grade 9 Language Arts Reading/Literature: 4.1.a, 4.2.c	CS.02.03.01.a CS.02.03.03.a
Unit 2 – Record Keeping			
Review the types of SAEs.	2.1, 2.2, 2.11	Grade 9 Language Arts Reading/Literature: 4.1.a, 4.2.c	ABS.01.02.01.a
Determine the purpose for keeping inventory.	2.4, 2.5, 2.9	Algebra 1 1.1.d Geometry 1.1	ABS.03.01.01.a ABS.04.01.02.a ABS.05.01.01.a
Explore the various record keeping transactions.	2.1, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11	Algebra 1 1.1.d Geometry 1.1	ABS.03.01.01.a ABS.04.01.02.a ABS.05.01.01.a
Determine the purpose and how to close records.	2.4, 2.5, 2.6, 2.7, 2.8, 2.9	Algebra 1 1.1.d	ABS.03.01.01.a ABS.04.01.02.a ABS.05.01.01.a
Discuss records kept for a placement SAE.	2.6, 2.7, 2.9, 2.10, 2.11	Grade 9 Language Arts Reading/Literature: 4.1.a, 4.2.c	ABS.03.01.01.a
Unit 3 – The Food Industry			
Discuss major operations that occur in the food industry.	3.1, 3.2, 3.3, 3.4, 3.6, 3.7, 3.8, 3.9	Physical Science Process 1.1 Biology Process 1.1	FPP.01.01.01.a
Identify government requirements and other assurance of food quality.	3.1, 3.6, 3.8	Physical Science Process Standard 7.2 Grade 9 Language Arts Reading/Literature: 4.1.a	FPP.01.02.01.a
Identify sources of food products and by-products.	3.1, 3.2, 3.3, 3.4, 3.5, 3.7	Physical Science 1.1 Biology Process 1.1	FPP.04.02.01.a FPP.04.02.02.a FPP.04.02.02.a
Discuss food customs of major world populations.	3.4, 3.8	Grade 9 Language Arts Reading/Literature: 4.1.a, 4.2.c	CS.02.02.01.b

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Unit 4 – Plant and Soil Science			
Determine how plants are taxonomically named.	4.1, 4.3	Biology Process Standard 2.1	PS.01.01.01.a
Discuss how plants are classified.	4.1, 4.3	Biology Process Standard 2.2 Biology 3.1	PS.01.01.02.a
Examine the processes that occur within a plant leaf.	4.1	Biology 1.1.a, 5.1, 5.2	PS.01.03.01.a PS.01.03.02.a
Determine the requirements for plant growth.	4.1, 4.3, 4.6, 4.7	Biology 5.1, 5.2 Environmental Science 1.2	PS.02.01.01.a PS.02.01.02.a
Identify types of plant growth media.	4.1	Environmental Science 2.1, 4.1.b	PS.02.02.01.a
Discuss soil formation and major components.	4.1, 4.8	Environmental Science 1.1.c, 1.1.d, 2.4, 4.1.c Biology 5.1, 5.2	ESS.03.02.01.a
Read the soil textural triangle.	4.8	Biology Process 4.3	ESS.03.02.03.a
Unit 5 – The Beef Cattle Industry			
Discuss the history of the beef cattle industry and its role today.	5.1	Grade 9 Language Arts Reading/Literature: 4.1.a, 4.2.c	AS.01.01.01.a
Identify major breeds of beef cattle and their characteristics.	5.1, 5.3	Biology Process Standard 2.1, 2.2	AS.02.01.02.a
Identify factors to consider when selecting beef cattle for a specific purpose.	5.6	Biology 3.1, 3.2, 3.3	AS.02.03
Discuss the phases of beef production.	5.1	Biology 4.2 Grade 9 Language Arts Reading/Literature: 2.1.c	AS.02.03
Locate the parts of a beef animal.	5.1, 5.4	Biology 4.8	AS.02.02.01.a AS.02.02.06.a
Determine the consumer products derived from beef cattle.	5.5	Biology 4.8 Environmental Science 4.3, 5.1, 5.2, 5.3.a, 5.3.b, 5.3.c	FPP.04.02.01.a

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Unit 6 – The Swine Industry			
Discuss the history of the swine industry and its role today.	6.1, 6.2, .6.6	Environmental Science 5.1, 5.2, 3.1, 3.2, 3.3 Grade 9: Language Arts 4.1.a, 4.2.c	AS.01.01.01.a
Identify major breeds of swine and their characteristics.	6.1, 6.3, 6.6	Biology 3.1, 3.2, 3.3	AS.02.01.02.a
Locate the key parts of a hog.	6.1, 6.4, 6.6	Biology 3.1, 3.2, 3.3	AS.02.02.01.a AS.02.02.06.a
Identify consumer products derived from swine.	6.1, 6.2, 6.6	Biology 4.1 Environmental Science 4.2, 4.3, 5.1, 5.2, 5.3, 5.3.a, 5.3.b, 5.3.c	FPP.04.02.01.a
Apply the universal ear notching system.	6.1, 6.5, 6.6	Biology Process 6.3	AS.06.02.02.a
Unit 7 – The Sheep Industry			
Discuss the history of the sheep industry and its role today.	7.1, 7.2, 7.5	Environmental Science 5.1, 5.2, 3.1, 3.2, 3.3 Grade 9: Language Arts 4.1.a, 4.2.c	AS.01.01.01.a
Identify major breeds of sheep and their characteristics.	7.1, 7.2, 7.5	Biology 3.1, 3.2, 3.3	AS.02.01.02.a
Locate the parts of a sheep.	7.1, 7.4, 7.5	Biology 3.1, 3.2, 3.3	AS.02.02.01.a AS.02.02.06.a
Identify consumer products derived from sheep.	7.1, 7.5	Biology 4.1 Environmental Science 4.2, 4.3, 5.1, 5.2, 5.3, 5.3.a, 5.3.b, 5.3.c	FPP.04.02.01.a
Recall facts about wool composition and quality.	7.1, 7.5	Biology Process 6.3	FPP.04.02.01.a
Unit 8 – The Dairy Cattle Industry			
Discuss the history of the dairy cattle industry and its role today.	8.1, 8.2, 8.6	Environmental Science 3.1,3.2, 3.3, 5.1, 5.2 Grade 9: Language Arts 4.1.a, 4.2.c	AS.01.01.01.a
Identify major breeds of dairy cattle and their characteristics.	8.1, 8.2, 8.6	Biology 3.1, 3.2, 3.3	AS.02.01.02.a
Locate the parts of a dairy cow.	8.1, 8.3, 8.6	Biology 3.1, 3.2, 3.3	AS.02.02.01.a AS.02.02.06.a
Identify consumer products derived from dairy cattle.	8.1, 8.4, 8.5, 8.6	Biology 4.1 Environmental Science 4.2, 4.3, 5.1, 5.2, 5.3, 5.3.a, 5.3.b, 5.3.c	FPP.04.02.01.a
Explain the physiology of milk production.	8.1, 8.4, 8.5, 8.6	Biology 3.2, 3.3	FPP.04.02.01.a
Discuss recent technological advances in dairying.	8.1, 8.6	Biology 2.2, 3.3	AS.06.02.02.a BS.03.01.02.a

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Unit 9 – The Horse Industry			
Discuss the history of horses and their role today.	9.1	Environmental Science 3.1,3.2, 3.3, 5.1, 5.2 Grade 9: Language Arts 4.1.a, 4.2.c	AS.01.01.01.a
Identify common breeds of horses and ponies, and their characteristics.	9.1, 9.3	Biology 3.1, 3.2, 3.3	AS.02.01.02.a
Discuss the use of equine for work and recreational uses.	9.1	Biology 3.2, 3.3	AS.01.01.02.b
Locate the parts of the horse.	9.1, 9.4	Biology 3.1, 3.2, 3.3	AS.02.02.01.a AS.02.02.06.a
Identify horse colors and markings.	9.1, 9.5, 9.6, 9.7	Biology 3.1	AS.02.01.02.a
Unit 10 – The Goat Industry			
Discuss the history of the goat industry and its role today.	10.2	Environmental Science 3.1,3.2, 3.3, 5.1, 5.2 Grade 9: Language Arts 4.1.a, 4.2.c	AS.01.01.01.a
Identify common breeds of goats and their characteristics.	10.1, 10.3	Biology 3.1, 3.2, 3.3	AS.02.01.02.a
Identify consumer products derived from goats.	10.1, 10.4	Biology 4.1 Environmental Science 4.2, 4.3, 5.1, 5.2, 5.3, 5.3.a, 5.3.b, 5.3.c	FPP.04.02.01.a
Determine the advantages of goat milk.	10.1	Environmental Science 5.1, 5.3.b	FPP.04.02.01.a
Discuss the difference between goat fibers.	10.1	Biology 3.1, 3.2, 3.3	FPP.04.02.01.a
Locate the parts of a goat.	10.5	Biology 3.1, 3.2, 3.3	AS.02.02.01.a AS.02.02.06.a

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Unit 11 – The Poultry Industry			
Discuss the history of the poultry industry and its role today.	11.2	Environmental Science 3.1,3.2, 3.3, 5.1, 5.2 Grade 9: Language Arts 4.1.a, 4.2.c	AS.01.01.01.a
Distinguish among terms and major species of poultry.	11.1	Biology 3.1, 3.2, 3.3	AS.02.01.02.a
Identify common breeds of chickens and their characteristics.	11.1, 11.2	Biology 3.1, 3.2, 3.3	AS.02.01.02.a
Locate the parts of a chicken.	11.1, 11.3	Biology 3.1, 3.2, 3.3	AS.02.02.01.a AS.02.02.06.a
Examine the development of an egg.	11.1, 11.4	Biology 3.1, 3.2, 3.3	AS.02.02.03.a AS.05.01.01.a
Discuss methods for incubating eggs and chickens.	11.1	Biology 3.1, 3.2, 3.3	AS.05.01.01.a
Identify consumer products derived from poultry.	11.5	Biology 4.1 Environmental Science 4.2, 4.3, 5.1, 5.2, 5.3, 5.3.a, 5.3.b, 5.3.c	FPP.04.02.01.a
Unit 12 – Small Animal Care			
Discuss the history and domestication of small animals.	12.1	Environmental Science 4.2, 4.3, 5.1, 5.2, 5.3, 5.3.a, 5.3.b, 5.3.c Grade 9: Language Arts 4.1.a, 4.2.c	AS.01.01.01.a
Determine the economic importance of small animals.	12.1, 12.3, 12.7	Environmental Science 3.3	AS.01.01.01.a
Describe the types and uses of various small animals.	12.1	Biology 2.1, 2.2	AS.01.01.01.a
Discuss how to properly feed and care for small animals.	12.4, 12.6, 12.7	Biology 4.2	AS.04

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Unit 13 – Agricultural Mechanics			
Identify common hazards in agricultural mechanics.	13.1, 13.2, 13.3, 13.4	Biology Process Standard 3.5	CS.06.01.01.a CS.06.02.01.a
Determine the importance of maintaining shop safety.	13.1, 13.3, 13.4	Biology Process Standard 3.5	CS.06.01.01.a CS.06.02.01.a
Match personal protective equipment with their purposes.	13.1, 13.3, 13.4	Biology Process Standard 3.5	CS.06.02.01.a
Discuss important welding safety practices.	13.1, 13.3, 13.4	Biology Process Standard 3.5	CS.06.01.01.a CS.06.02.01.a
Match classes of fire to their correct descriptions and extinguisher type.	13.1, 13.3, 13.4	Biology Process Standard 3.5	CS.06.01.01.a CS.06.02.01.a
Unit 14 – Arc Welding and Oxy-Gas			
Distinguish among the methods of welding.	14.1, 14.7	Environmental Science 1.2, 3.5	PST.04.04.07.b
Identify equipment used for shielded metal arc welding.	14.1, 14.2, 14.7	Environmental Science 1.2, 3.5	PST.04.04.07.a PST.04.04.07.b
Demonstrate procedures for striking an arc and running a bead.	14.2, 14.7	Environmental Science 3.5, 4.1, 4.3	PST.04.04.07.a PST.04.04.07.b
Identify equipment used for oxyacetylene cutting.	14.1, 14.7	Environmental Science 1.1, 1.2, 3.5	PST.04.04.07.a PST.04.04.07.b
Explain the purpose of oxygen and fuel gases used in oxy-gas cutting.	14.1, 14.7	Environmental Science 3.5	PST.04.04.07.a PST.04.04.07.b
Discuss the oxy-gas cutting process.	14.4, 14.7	Environmental Science 1.2	PST.04.04.07.a PST.04.04.07.b
Determine how to properly adjust an oxyacetylene flame.	14.3, 14.4, 14.7	Environmental Science 1.2, 3.5, 4.1	PST.04.04.07.a PST.04.04.07.b
Demonstrate the procedure for cutting steel.	14.5, 14.7	Environmental Science 1.2, 3.5, 4.1	PST.04.04.07.a PST.04.04.07.b
Discuss errors made when cutting steel.	14.5, 14.6, 14.7	Environmental Science 3.5, 4.1	PST.04.04.07.a PST.04.04.07.b