

AgX Standards Alignment – NALO

<p>National Agricultural Literacy Outcomes</p> 	Lesson 1 Ag in the Past	Lesson 2 Plants We Grow	Lesson 3 Resources We Use	Lesson 4 Resources We Recycle	Lesson 5 Energy We Consume	Lesson 6 Animals We Care For	Lesson 7 Food We Eat	Lesson 8 Ag in My Future
Theme 1: Agriculture and the Environment								
<ul style="list-style-type: none"> a. Compare and contrast the advantages and disadvantages involved when converting natural ecosystems to agricultural ecosystems. 		X						
<ul style="list-style-type: none"> b. Describe benefits and challenges of using conservation practices for natural resources (e.g., soil, water, and forests), in agricultural systems which impact water, air, and soil quality. 		X	X	X				
<ul style="list-style-type: none"> c. Discover how natural resources are used and conserved in agriculture (e.g., soil conservation, water conservation). 		x	X	x				
<ul style="list-style-type: none"> d. Discuss (from multiple perspectives) land and water use by various groups (i.e., ranchers, farmers, hunters, miners, recreational users, government, etc.), and how each use carries a specific set of benefits and consequences that affect people and the environment. 	X			X				
<ul style="list-style-type: none"> e. Discuss the comparative environmental pros and cons of populations relying on their local and regional resources versus tapping into a global marketplace. 								
<ul style="list-style-type: none"> f. Explain and discuss why people migrate and change environments to meet their basic needs. 								
<ul style="list-style-type: none"> g. Recognize how climate and natural resources determine the types of crops and livestock that can be grown and raised for consumption. 				X				
<ul style="list-style-type: none"> h. Recognize the factors of an agricultural system which determine its sustainability. 	X	X	X	X	X			
Theme 2: Plants and Animals for Food, Fiber, & Energy Outcomes								
<ul style="list-style-type: none"> a. Describe the differences in plants and animals used for food, clothing, shelter, and fuel before and after European settlement of the United States. 	X					X		
<ul style="list-style-type: none"> b. Explain the role of ethics in the production and management of food, fiber (fabric or clothing), and energy sources. 			X		X	X		
<ul style="list-style-type: none"> c. Identify farm practices for plant protection (e.g., using a pesticide, integrated pest management, cultural practices) and the harvest of safe products for consumers. 		X						
<ul style="list-style-type: none"> d. Identify renewable and nonrenewable energy sources. 			X		X			
<ul style="list-style-type: none"> e. Identify strategies for housing for animal welfare and the safety of animal products (e.g., meat, milk, eggs). 						X		
<ul style="list-style-type: none"> f. Identify where labeling indicates the origin of food and fiber (fabric or clothing). 				X				
Theme 3: Food, Health, and Lifestyle Outcomes								
<ul style="list-style-type: none"> a. Demonstrate safe methods for food handling, preparation, and storage in the home. 							X	X
<ul style="list-style-type: none"> b. Evaluate food labels to determine food sources that meet nutritional needs. 							X	X
<ul style="list-style-type: none"> c. Evaluate serving size related to nutritional needs. 							X	X
<ul style="list-style-type: none"> d. Explain how factors, such as culture, convenience, access, and marketing affect food choices locally, regionally, and globally. 							X	
<ul style="list-style-type: none"> e. Explain the benefits and disadvantages of food processing. 							X	
<ul style="list-style-type: none"> f. Explain the role of ethics in the production and management of food, fiber (fabric or clothing), and energy sources. 			X		X			

National Agricultural Literacy Outcomes



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<ul style="list-style-type: none"> g. Identify agricultural products (foods) that provide valuable nutrients for a balanced diet. 							X	
<ul style="list-style-type: none"> h. Identify forms and sources of food contamination relative to personal health and safety. 							X	
<ul style="list-style-type: none"> i. Identify sources of agricultural products that provide food, fuel, clothing, shelter, medical, and other non-food products for their community, state, and/or nation. 	X		X		X	X	X	X
<ul style="list-style-type: none"> j. Identify the careers in food production, processing, and nutrition that are essential for a healthy food supply. 					X			X
Theme 4: Science, Technology, Engineering, & Mathematics Outcomes								
<ul style="list-style-type: none"> a. Compare and contrast historical and current food processing and systems. 							X	
<ul style="list-style-type: none"> b. Describe how biological processes influence and are leveraged in agricultural production and processing (e.g., photosynthesis, fermentation, cell division, heredity/genetics, nitrogen fixation). 		X		X	X	X		
<ul style="list-style-type: none"> c. Describe the process of development from hunting and gathering to farming. 	X							
<ul style="list-style-type: none"> d. Discuss how technology has changed over time to help farmers/ranchers provide more food to more people. 		X						
<ul style="list-style-type: none"> e. Explain how and why agricultural innovation influenced modern economic systems. 				X				
<ul style="list-style-type: none"> f. Explain the harmful and beneficial impacts of various organisms related to agricultural production and processing (e.g., harmful bacteria/beneficial bacteria, harmful/beneficial insects) and the technology developed to influence these organisms. 		X						
<ul style="list-style-type: none"> g. Identify science careers related to both producers and consumers of agricultural products. 					X	X		
<ul style="list-style-type: none"> h. Identify specific technologies that have reduced labor in agriculture. 								
<ul style="list-style-type: none"> i. Provide examples of science and technology used in agricultural systems (e.g., GPS, artificial insemination, biotechnology, soil testing, ethanol production, etc.); explain how they meet our basic needs; and detail their social, economic, and environmental impacts. 			X					
Theme 5: Culture, Society, Economy, & Geography Outcomes								
<ul style="list-style-type: none"> a. Consider the economic value of agriculture in America. 								
<ul style="list-style-type: none"> b. Distinguish between careers in production (farmers and ranchers) with those that directly involve consumers (business and nutrition). 								X
<ul style="list-style-type: none"> c. Explain how agricultural production and trade led to the development of industrialized societies. 								
<ul style="list-style-type: none"> d. Explain how prices for agricultural goods are determined. 								
<ul style="list-style-type: none"> e. Explain the role of exploration and trade in sustaining early societies. 								
<ul style="list-style-type: none"> f. Highlight the interaction and significance of state historical and current agricultural events on governmental and economic developments (e.g., the building of railroads, the taxation of goods, etc.). 								
<ul style="list-style-type: none"> g. Identify agricultural products that are exported and imported. 								
<ul style="list-style-type: none"> h. Identify farm ownership in relation to processor ownership (e.g., cooperatives, corporations, vertical integration). 								