



Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

ELEMENTARY
AGRICULTURAL EDUCATION
Kindergarten – Grade 5
GEORGIA STANDARDS OF EXCELLENCE

Georgia Department of Education
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Overview:

These Georgia Agricultural Education Elementary Standards of Excellence are designed to allow elementary students to explore Agriculture, Food & Natural Resources. Classroom and laboratory activities should include instruction in an organized classroom; collaborative agricultural learning experiences through investigation and inquiry, including laboratory and site-based learning activities; and personal and leadership development opportunities. These elementary agricultural standards are organized under four domains: **Agricultural Systems, Foundations of Agriculture, Leadership/Career Readiness and Natural Resource Systems.**

The following is an example of the nomenclature or coding structure for the identification of the standards and elements. Kindergarten example: KLCR1 = Kindergarten Leadership/Career Readiness standard number 1. First Grade example: 1FA2 = 1st grade Foundations of Agriculture standard 2. The lowercase bullets under standards further define and clarify the standard and are called elements. For example: 1LCR1a = First Grade Leadership/Career Readiness standard 1 element a.

Kindergarten Agricultural Standards

Agricultural Systems (AS) Domain

Domain Description: Investigate and develop an understanding of agricultural systems such as Agricultural Mechanics; Plant Systems; Animal Systems; and/or Food Systems (Ag Safety).

KAS1. Connect and categorize the products used daily in agriculture

KAS2. Identify agricultural tools, uses, and safety.

KAS3. Distinguish between edible and non-edible plants that are produced in agriculture

Sample Tasks: Create graphic organizers of various plant uses; Create graphic organizers of various animal uses; Distinguish between animals used for food, service, and by-product; Develop a simple machine that can be used in an agricultural setting (i.e., push/pull, back/forth); Plant a variety of edible and non-edible plants.

Foundations of Agriculture (FA) Domain

Domain Description: Explore and communicate the importance of agriculture and its impact on daily life.

KFA1. Discuss & cite examples of the three basic agricultural human needs of food, clothing/fiber, and shelter.

Sample Tasks: Find commodity location on a map; Explore food products (grow, harvest, prepare, safety, nutrition)

Leadership/Career Readiness (LCR) Domain

Domain Description: Develop an understanding of the National FFA Organization while exploring careers and demonstrating leadership skills and characteristics for career readiness as indicated by the National FFA Organization.

KLCCR1. Describe and connect characteristics of agricultural jobs.

KLCCR2. Begin to recognize and demonstrate the use of interpersonal qualities, also known as people skills.

Sample Tasks: farmer, rancher, forester, veterinarian, chef, etc.; verbal-saying please and thank you, you're welcome, excuse me, non-verbal (shaking hands, eye contact, sharing)

Natural Resource Systems (NRS)

Domain Description: Develop and build an understanding of the area of forestry, environmental and natural resource systems (wildlife).

KNRS1. Differentiate the use of livestock, companion animals, and wildlife

KNRS2. Analyze and investigate the need to reduce, reuse, and recycle

Sample Tasks: Clean school grounds; Raise awareness by creating posters for the community; Plan and carry out a recycling project

First Grade Agricultural Standards

Agricultural Systems (AS) Domain

Domain Description: Investigate and develop an understanding of agricultural systems such as Agricultural Mechanics; Plant Systems; Animal Systems; and/or Food Systems (Ag Safety).

1AS1. Diagram and compare the basic needs and structures of plants

1AS2. Measure using various tools (rulers, yardsticks, measuring tapes, etc.)

1AS3. Produce a plant from a seed and/or a cutting.

1AS4. Produce a plant in growing media, using an alternative method (aquaponics, hydroponics, or aeroponics).

Foundations of Agriculture (FA) Domain

Domain Description: Explore and communicate the importance of agriculture and its impact on daily life.

1FA1. Identify important agriculture industries in your area.

1FA2. Examine agricultural products grown in your area through viewing, tasting, & touching

1FA3. Preserve a food that was grown in your area.

1FA4. Collect, display and discuss parts of a plant and the importance of each part (roots, leaf, stem, seed, fruit, flower).

Leadership/Career Readiness (LCR) Domain

Domain Description: Develop an understanding of the National FFA Organization while exploring careers and demonstrating leadership skills and characteristics for career readiness as indicated by the National FFA Organization.

- 1LCR1. Demonstrate and develop soft skills using the FFA motto.
- a. Define and demonstrate a strong work ethic while “Learning to Do and Doing to Learn.”
 - b. Define and demonstrate a positive attitude while “Learning to Do and Doing to Learn.”
 - c. Explore careers related to the plant industry such as horticulturist, arborist, landscaper, greenhouse operator, or plant breeder while demonstrating “Earning to Live.”
 - d. Define and demonstrate being respectful while demonstrating “Living to Serve.”
 - e. Define and demonstrate a spirit of community service while demonstrating “Living to Serve.”

Natural Resource Systems (NRS) Domain

Domain Description: Develop and build an understanding of the area of forestry, environmental and natural resource systems (wildlife).

- 1NRS1. Estimate and measure a tree using tools created by students
- 1NRS2. Identify, map and label deciduous and evergreen trees nearby.
- 1NRS3. Compare the different types of soil found in Georgia.

Second Grade Agricultural Standards

Agricultural Systems (AS) Domain

Domain Description: Investigate and develop an understanding of agricultural systems such as Agricultural Mechanics; Plant Systems; Animal Systems; and/or Food Systems (Ag Safety).

2AS1. Analyze the importance of animals in agriculture and examine the role they play in the lives of consumers.

2AS2. Investigate the life cycles of different animals (i.e., incubating eggs, raising butterflies, bees, turkeys, quails, rabbits, goats, or chickens).

2AS3. Demonstrate an understanding of food safety when handling animal products or byproducts such as eggs, milk, cheese, honey or butter.

Foundations of Agriculture (FA) Domain

Domain Description: Explore and communicate the importance of agriculture and its impact on daily life.

2FA1. Analyze household and daily used items to determine how they were made (Georgia Commodities).

2FA2. Investigate and map *Georgia regions - locate and compare the geographic regions such as crops/fruit production, livestock/poultry, native trees and plants, wildlife, fall line, and forestry.*

2FA3. 3. Identify historical figures in Georgia agriculture history and describe their contributions.

Leadership/Career Readiness (LCR) Domain

Domain Description: Develop an understanding of the National FFA Organization while exploring careers and demonstrating leadership skills and characteristics for career readiness as indicated by the National FFA Organization.

2LCR1. Identify and apply concepts related to the National FFA mission. (premier leadership, personal growth, and career success).

2LCR2. Practice leadership and employability skills such as person to person etiquette, verbal and nonverbal communication, listening, speaking, eye contact, shaking hands, work ethic, being respectful, and demonstrating a good attitude.

2LCR3. Explore and investigate agriculture careers.

Natural Resource Systems (NRS) Domain

Domain Description: Develop and build an understanding of the area of forestry, environmental and natural resource systems (wildlife).

- 2NRS1. Analyze Georgia’s renewable and nonrenewable natural resources.
- 2NRS2. Define and identify sustainability practices in agriculture in the school’s region.

Third Grade Agricultural Standards

Agricultural Systems (AS) Domain

Domain Description: Investigate and develop an understanding of agricultural systems such as Agricultural Mechanics; Plant Systems; Animal Systems; and/or Food Systems (Ag Safety).

- 3AS1. Relate the importance of food safety, preparation, and nutrition.
- 3AS2. Research and describe the role of pollinators (bees, birds, butterflies, etc.)

Sample Tasks: As a class, bring in favorite snacks and analyze the nutrition labels. Categorize the snacks based on the nutrients found in the snack.; Research nutritional values of various foods.; Students will determine proper washing techniques for hands, fruits, vegetables, and protein.

Foundations of Agriculture (FA) Domain

Domain Description: Explore and communicate the importance of agriculture and its impact on daily life.

- 3FA1. Define agriculture and how it impacts daily life.
- 3FA2. Identify commodities based on the different geographic regions of Georgia and determine how environmental factors affect agriculture production in each region.
- 3FA3. Categorize agriculture products and by-products.

Sample Tasks: (FA3.1) Students list their favorite ingredients for pizza and/or cheeseburgers, then trace the food origins; Students can plot on a map where the products are grown in the United States. (FA3.2) Students will create a graphic organizer that includes the region name, at least three commodities for that region, and several environmental factors such as climate, topography and soil composition. (FA3.3) Students will be given a pictorial representation of an agricultural product and determine if it is a product or by-product. Students will explore products and by-products by making butter, playing BEEFO Bingo, and participating in there is a cow in my marshmallow activity.

Leadership/Career Readiness (LCR) Domain

Domain Description: Develop an understanding of the National FFA Organization while exploring careers and demonstrating leadership skills and characteristics for career readiness as indicated by the National FFA Organization.

3LCR1. Identify and participate the three main parts of the agricultural education program. (classroom, experiential learning, and leadership).

3LCR2. Develop and practice soft skills such as public speaking, eye contact, and good citizenship.

Sample Tasks: Students will create a presentation with visual aids that explain agricultural education, leadership, and exploratory/investigative opportunities (e.g. planting a garden, researching a career, conducting an interview on agricultural topics, etc. Students will create a questionnaire around agricultural topics, conduct the questionnaire outside of school, and share the results in class. (sample topics for questionnaire: who invented what, what part of the plant do we eat, fruit vs. vegetable, common myths, etc.

Natural Resource Systems (NRS) Domain

Domain Description: Develop and build an understanding of the area of forestry, environmental and natural resource systems (wildlife).

3NRS1. Identify natural resources and explore the effects of humans and pollution on the environment.

3NRS2. Examine humans' environmental impact (*water, air, soil, plants, insects*) on agricultural production in your region.

Sample Tasks: Students will create an edible aquifer to identify the different layers of soil and how pollution and erosion impact the layers.; Students will bring soil samples from their home and create a horizon jar/soil profile jar.

Fourth Grade Agricultural Standards

Agricultural Systems (AS) Domain

Domain Description: Investigate and develop an understanding of agricultural systems such as Agricultural Mechanics; Plant Systems; Animal Systems; and/or Food Systems (Ag Safety).

4AS1. Identify basic building tools (i.e., hammer, screwdriver, nail, screw, etc.) and determine proper uses.

4AS2. Identify and assess which simple machine will complete a task (i.e., lever, pulley, wedge, inclined plane, wheel and axle, and screw).

4AS3. Design and create an example of a simple machine that can be used to complete an agricultural task.

Foundations of Agriculture (FA) Domain

Domain Description: Explore and communicate the importance of agriculture and its impact on daily life.

4FA1. Identify and compare regional commodities of Georgia

4FA2. Connect the relationship between weather and agriculture.

Sample Tasks: Compare and contrast the past and present importance of cotton). Identify the products and byproducts from agricultural commodities. Analyze the impact of agriculture on daily life. Graph patterns and interpret weather data. Construct an explanation of how weather instruments and are used in gathering weather data and making forecasts.

Leadership/Career Readiness (LCR) Domain

Domain Description: Develop an understanding of the National FFA Organization while exploring careers and demonstrating leadership skills and characteristics for career readiness as indicated by the National FFA Organization.

4LCR1. Develop and apply verbal and nonverbal communication skills such as public speaking/presentations.

4LCR2. Exhibit proper communication skills with adults and peers.

4LCR3. Develop a logical argument supporting or opposing an issue.

Sample Tasks: parliamentary procedure SS4H2b, interview an adult, debate a current events topic

Natural Resource Systems (NRS) Domain

***Domain Description:* Develop and build an understanding of the area of forestry, environmental and natural resource systems (wildlife).**

4NRS1. Identify, investigate, and compare multiple native plant species in Georgia.

4NRS2. Identify, investigate, and compare multiple native animal species in Georgia and label as herbivore, carnivore, omnivore, and scavenger.

4NRS3. Create a food web using identified native species.

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Fifth Grade Agricultural Standards

Agricultural Systems (AS) Domain

Domain Description: Investigate and develop an understanding of agricultural systems such as Agricultural Mechanics; Plant Systems; Animal Systems; and/or Food Systems (Ag Safety).

5AS1. Classify and differentiate between different breeds of livestock.

5AS2. Differentiate and understand parts of organisms and how they are utilized in agriculture.

5AS3. Classify and differentiate between different types of plants, trees and seeds.

5AS4. Differentiate and understand parts of plants, trees and seeds and how they are utilized in agriculture.

5AS5. Understand the biotechnology systems associated with agriculture.

Sample Tasks: Primal/retail cuts of meat; Plant parts and functions; Plant parts we eat; Identify plants and trees specific to your area; Identify livestock crops associated with your area.

Foundations of Agriculture (FA)

Domain Description: Explore and communicate the importance of agriculture and its impact on daily life.

5FA1. Analyze the impact of agriculture on daily life.

5FA2. Identify and understand agricultural commodities and by products.

5FA3. Explore and cite examples of Georgia agricultural history, economics and inventions.

Sample Tasks: Commodity Projects; By Products in daily life; Historical figures link; Economic link; Farm to plate investigation

Leadership/Career Readiness (LCR) Domain

Domain Description: Develop an understanding of the National FFA Organization while exploring careers and demonstrating leadership skills and characteristics for career readiness as indicated by the National FFA Organization.

- 5LCR1. Demonstrate and practice employability skills for career readiness.
- 5LCR2. Compare and analyze agricultural careers.
- 5LCR3. Understand the National FFA Organization opportunities and officer roles.

Sample Tasks: Research and demonstrate aspects of a specific agricultural career. Students will be assigned an FFA Officer position and participate in FFA official ceremonies.

Natural Resource Systems (NRS) Domain

Domain Description: Develop and build an understanding of the area of forestry, environmental and natural resource systems (wildlife).

- 5NRS1. Assess the impact of agricultural practices on forests, soils and other natural resources.
- 5NRS2. Describe the benefits of the importance of conservation and recycling of natural resources.

Sample Tasks: Analyze soil samples, Composting, Alternative Energy, Organic Farming, Recycling, Reforestation, Sustainability