

Relevant Georgia Performance Standards

The Shields-Ethridge Heritage Farm provides a unique opportunity for students to gain economic and agricultural understanding, practice independent reading, interpret and clarify information, increase vocabulary, and to listen and communicate orally. Written products of Farm visits demonstrate students' ability to express and understand ideas. The specific standards that can be applied at the Farm are:

Kindergarten Performance Standards

SSKE1 The student will describe the *work* that people do (police officer, fire fighter, soldier, mail carrier, baker, farmer, doctor, and teacher).

First Grade Performance Standards

SS1E1 The student will identify *goods* that people make and *services* that people provide for each other.

SS1E3 The student will describe how people are both *producers* and *consumers*.

SS2E3 The student will explain that people usually use money to obtain the goods and services they want and explain how money makes trade easier than barter.

Third Grade Performance Standards

SS3E1 The student will describe the four types of productive resources:

- a. Natural (land)
- b. Human (labor)
- c. Capital (capital goods)
- d. Entrepreneurship (used to create goods and services)

SS3E3 The student will give examples of interdependence and trade and will explain how *voluntary exchange* benefits both parties.

- a. Describe the *interdependence* of consumers and producers of goods and services.
- b. Describe how goods and services are allocated by price in the marketplace.
- c. Explain that some things are made locally, some elsewhere in the country, and some in other countries.
- d. Explain that most countries create their own currency for use as money.

ELA3LSV1 The student uses oral and visual strategies to communicate. The student

- a. Adapts oral language to fit the situation by following the rules of conversation with peers and adults.
- b. Recalls, interprets, and summarizes information presented orally.
- c. Uses oral language for different purposes: to inform, persuade, or entertain.
- d. Listens to and views a variety of media to acquire information.

S3CS4 Students will use ideas of system, model, change, and scale in exploring scientific and technological matters.

- a. Observe and describe how parts influence one another in things with many parts.
- b. Use geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and stories to represent corresponding features of objects, events, and processes in the real world.
- c. Identify ways in which the representations do not match their original counterparts.

S3CS8 Students will understand important features of the process of scientific inquiry.

Students will apply the following to inquiry learning practices:

- a. Scientific investigations may take many different forms, including observing what things are like or what is happening somewhere, collecting specimens for analysis, and doing experiments.
- b. Clear and active communication is an essential part of doing science. It enables scientists to inform others about their work, expose their ideas to criticism by other scientists, and stay informed about scientific discoveries around the world.
- c. Scientists use technology to increase their power to observe things and to measure and compare things accurately.
- d. Science involves many different kinds of work and engages men and women of all ages and backgrounds.

M3N2 Students will further develop their skills of addition and subtraction and apply them in problem solving.

- a. Use the properties of addition and subtraction to compute and verify the results of computation.
- b. Use mental math and estimation strategies to add and subtract.
- c. Solve problems requiring addition and subtraction.

M3P1 Students will solve problems (using appropriate technology).

- a. Build new mathematical knowledge through problem solving.
- b. Solve problems that arise in mathematics and in other contexts.
- c. Apply and adapt a variety of appropriate strategies to solve problems.
- d. Monitor and reflect on the process of mathematical problem solving.

M3P4 Students will make connections among mathematical ideas and to other disciplines.

- a. Recognize and use connections among mathematical ideas.
- b. Understand how mathematical ideas interconnect and build on one another to produce a coherent whole.
- c. Recognize and apply mathematics in contexts outside of mathematics.

M3P5 Students will represent mathematics in multiple ways.

- a. Create and use representations to organize, record, and communicate mathematical ideas.
- b. Select, apply, and translate among mathematical representations to solve problems.
- c. Use representations to model and interpret physical, social, and mathematical phenomena

Fourth Grade Performance Standards

SS4E1 The student will use the basic economic concepts of *trade*, *opportunity cost*, *specialization*, *voluntary exchange*, *productivity*, and *price incentives* to illustrate historical events.

- a. Describe *opportunity costs* and their relationship to decision-making across time (such as decisions to send expeditions to the New World).
- b. Explain how *price incentives* affect people's behavior and choices (such as colonial decisions about what crops to grow and products to produce).
- c. Describe how *specialization* improves standards of living (such as how specific economies in the three colonial regions developed).
- d. Explain how *voluntary exchange* helps both buyers and sellers (such as prehistoric and colonial trade in North America).
- e. Describe how *trade* promotes economic activity (such as how trade activities in the early nation were managed differently under the Articles of Confederation and the Constitution).
- f. Give examples of technological advancements and their impact on business *productivity* during the development of the United States.

S4CS8 Students will understand important features of the process of scientific inquiry.

Students will apply the following to inquiry learning practices:

- a. Scientific investigations may take many different forms, including observing what things are like or what is happening somewhere, collecting specimens for analysis, and doing experiments.
- b. Clear and active communication is an essential part of doing science. It enables scientists to inform others about their work, expose their ideas to criticism by other scientists, and stay informed about scientific discoveries around the world.
- c. Scientists use technology to increase their power to observe things and to measure and compare things accurately.
- d. Science involves many different kinds of work and engages men and women of all ages and backgrounds.

ELA4LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics in addition to responding to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.
- d. Uses language cues to indicate different levels of certainty or hypothesizing (e.g., "What if. . ."; "Very likely. . ."; "I'm unsure whether. . .").
- e. Confirms understanding by paraphrasing the adult's directions or suggestions.
- f. Displays appropriate turn-taking behaviors.
- g. Actively solicits another person's comments or opinions.
- h. Offers own opinion forcefully without domineering.
- i. Responds appropriately to comments and questions.
- j. Volunteers contributions and responds when directly solicited by teacher or discussion leader.
- k. Gives reasons in support of opinions expressed.
- l. Clarifies, illustrates, or expands on a response when asked to do so; asks classmates for similar expansions

ELA4R3 The student understands and acquires new vocabulary and uses it correctly in reading and writing. The student

- a. Reads a variety of texts and incorporates new words into oral and written language.
- b. Determines the meaning of unknown words using their context.
- c. Identifies the meaning of common root words to determine the meaning of unfamiliar words.
- d. Determines meanings of words and alternate word choices using a dictionary or thesaurus.
- e. Identifies the meaning of common prefixes (e.g., un-, re-, dis-).
- f. Identifies the meaning of common idioms and figurative phrases.
- g. Identifies playful uses of language (e.g., puns, jokes, palindromes).
- h. Recognizes and uses words with multiple meanings (e.g., sentence, school, hard) and determines which meaning is intended from the context of the sentence.
- i. Identifies and applies the meaning of the terms antonym, synonym, and homophone

ELA4W1 The student produces writing that establishes an appropriate organizational structure, sets a context and engages the reader, maintains a coherent focus throughout, and signals a satisfying closure. The student

- a. Selects a focus, an organizational structure, and a point of view based on purpose, genre expectations, audience, length, and format requirements.
- b. Writes texts of a length appropriate to address the topic or tell the story.
- c. Uses traditional structures for conveying information (e.g., chronological order, cause and effect, similarity and difference, and posing and answering a question).
- d. Uses appropriate structures to ensure coherence (e.g., transition elements).

M\$M1 Students will understand the concept of weight and how to measure weight.

- a. Use standard and metric units to measure the weight of objects.
- b. Know units used to measure weight (gram, kilogram, ounce, pound, and ton).
- c. Compare one unit to another within a single system of measurement.

Fifth Grade Performance Standards

SS5E1 The student will use the basic economic concepts of *trade*, *opportunity cost*, *specialization*, *voluntary exchange*, *productivity*, and *price incentives* to illustrate historical events.

- a. Describe *opportunity costs* and their relationship to decision-making across time (such as decisions to remain unengaged at the beginning of World War II in Europe).
- b. Explain how *price incentives* affect people's behavior and choices (such as monetary policy during the Great Depression).
- c. Describe how *specialization* improves standards of living, (such as how specific economies in the north and south developed at the beginning of the 20th century).
- d. Explain how *voluntary exchange* helps both buyers and sellers (such as among the G8 countries).
- e. Describe how *trade* promotes economic activity (such as trade activities today under NAFTA).
- f. Give examples of technological advancements and their impact on business *productivity* during the development of the United States.

SS5E3 The student will describe how consumers and businesses interact in the United States economy across time.

- a. Describe how *competition, markets, and prices* influence people's behavior.
- b. Describe how people earn *income* by selling their labor to businesses.
- c. Describe how *entrepreneurs* take risks to develop new goods and services to start a business.

S5CS2 Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations.

- a. Add, subtract, multiply, and divide whole numbers mentally, on paper, and with a calculator.
- b. Use fractions and decimals, and translate between decimals and commonly encountered fractions – halves, thirds, fourths, fifths, tenths, and hundredths (but not sixths, sevenths, and so on) – in scientific calculations.
- c. Judge whether measurements and computations of quantities, such as length, area, volume, weight, or time, are reasonable answers to scientific problems by comparing them to typical values.

S5CS8 Students will understand important features of the process of scientific inquiry.

Students will apply the following to inquiry learning practices:

- a. Scientific investigations may take many different forms, including observing what things are like or what is happening somewhere, collecting specimens for analysis, and doing experiments.
- b. Clear and active communication is an essential part of doing science. It enables scientists to inform others about their work, expose their ideas to criticism by other scientists, and stay informed about scientific discoveries around the world.
- c. Scientists use technology to increase their power to observe things and to measure and compare things accurately.
- d. Science involves many different kinds of work and engages men and women of all ages and backgrounds

M5P1 Students will solve problems (using appropriate technology).

- a. Build new mathematical knowledge through problem solving.
- b. Solve problems that arise in mathematics and in other contexts.
- c. Apply and adapt a variety of appropriate strategies to solve problems.
- d. Monitor and reflect on the process of mathematical problem solving.

M5P4 Students will make connections among mathematical ideas and to other disciplines.

- a. Recognize and use connections among mathematical ideas.
- b. Understand how mathematical ideas interconnect and build on one another to produce a coherent whole.
- c. Recognize and apply mathematics in contexts outside of mathematics.

M5P5 Students will represent mathematics in multiple ways.

- a. Create and use representations to organize, record, and communicate mathematical ideas.
- b. Select, apply, and translate among mathematical representations to solve problems.
- c. Use representations to model and interpret physical, social, and mathematical phenomena.

ELA5LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions.

- a. Initiates new topics in addition to responding to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.
- d. Uses language cues to indicate different levels of certainty or hypothesizing (e.g., “What if. . .”; “Very likely. . .”; “I’m unsure whether. . .”).
- e. Confirms understanding by paraphrasing the adult’s directions or suggestions.
- f. Displays appropriate turn-taking behaviors.
- g. Actively solicits another person’s comments or opinions.
- h. Offers own opinion forcefully without domineering.
- i. Responds appropriately to comments and questions.
- j. Volunteers contributions and responds when directly solicited by teacher or discussion leader.
- k. Gives reasons in support of opinions expressed.
- l. Clarifies, illustrates, or expands on a response when asked to do so; asks classmates for similar expansions\

Social Studies Performance Standards in higher grades

SS8E1 The student will give examples of the kinds of goods and services produced in Georgia in different historical periods.

SS8G1 The student will describe Georgia with regard to physical features and location.

a. Locate Georgia in relation to region, nation, continent, and hemispheres.

b. Describe the five geographic regions of Georgia; include the Blue Ridge Mountains, Valley and Ridge, Appalachian Plateau, Piedmont, and Coastal Plain.

c. Locate and evaluate the importance of key physical features on the development of Georgia; include the Fall Line, Okefenokee Swamp, Appalachian Mountains, Chattahoochee and Savannah Rivers, and barrier islands.

d. Evaluate the impact of climate on Georgia's development.

SS8H8 The student will analyze the important events that occurred after World War I and their impact on Georgia.

a. Describe the impact of the boll weevil and drought on Georgia.

b. Explain economic factors that resulted in the Great Depression.

c. Discuss the impact of the political career of Eugene Talmadge.

d. Discuss the effect of the New Deal in terms of the impact of the Civilian Conservation Corps, Agricultural Adjustment Act, rural electrification, and Social Security.

SSEF4 The student will compare and contrast different economic systems, and explain how they answer the three basic economic questions of what to produce, how to produce and for whom to produce.

a. Compare command, market, and mixed economic systems with regard to private ownership, profit motive, consumer sovereignty, competition, government regulation.

b. Evaluate how well each type of system answers the three economic questions and meets the broad social and economic goals of freedom, security, equity, growth, efficiency and stability

SSEMI3 The student will explain how markets, prices and competition influence economic behavior.

a. Identify and illustrate on a graph, factors that cause changes in market supply and demand.

b. Explain and illustrate on a graph how price floors create surpluses and price ceilings create shortages.

c. Define price elasticity of demand and supply.

SSEF6 The student will explain how productivity, economic growth and future standards of living are influenced by investment in factories, machinery, new technology and the health, education and training of people.

a. Define productivity as the relationship of inputs to outputs.

b. Give illustrations of investment in equipment and technology and explain their relationship to economic growth.

c. Give examples of how investment in education can lead to a higher standard of living.

SSUSH17 The student will analyze the causes and consequences of the Great Depression.

a. Describe the causes including over production, under consumption, and stock market speculation that led to the stock market crash of 1929 and Great Depression.

b. Explain the impact of the drought in the creation of the Dust Bowl.

c. Explain the social and political impact of widespread unemployment that resulted in developments such as Hoovervilles

SSUSH18 The student will describe Franklin Roosevelt's New Deal as a response to the depression and compare the ways governmental programs aided those in need.

SSEF1 The student will explain why limited productive resources and unlimited wants result in scarcity, opportunity costs and trade offs for individuals, businesses and governments.

a. Define scarcity as a basic condition which exists when limited productive resources exceed unlimited wants.

b. Define and give examples of productive resources as land (natural), labor (human), capital (capital goods), entrepreneurship.

c. List a variety of strategies for allocating scarce resources.

d. Define opportunity cost as the next best alternative given up when individuals, businesses and governments confront scarcity by making choices.

The content developer for the subject area resources was Martha Lentz Walker, who holds a doctorate in Curriculum and Instruction. Susan Ethridge Chaisson, Chair of the Shields-Ethridge Heritage Farm consulted with Dr. Walker regarding the accuracy of information included on the website. The research undergirding the content in this website is that of Ian Firth in Shields-Ethridge Heritage Farm Landscape Master Plan (1998) and Patricia Stalling's Presenting Mr. Ira's Masterpiece: Two Centuries of

Agricultural Change at the Shields' Ethridge Farm (2002).