Grade Three

Third graders are making the transition from learning to read to reading to learn. They read much more widely on a variety of topics. The third-grade students increase their abilities to read aloud with fluency and comprehension. Third graders read more thoughtfully, discover more details, extract deeper meaning in what they read, and read more complex texts. They enjoy a variety of genres, including fiction and non-fiction texts and poetry.

Third graders are more able to work independently on research projects, making their writing more sophisticated and meaningful. With some guidance, they use all aspects of the writing process in producing their own compositions and reports. They are much more adept at summarizing main points from fiction and non-fiction texts, and they use more abstract skills of synthesis and evaluation in writing. By the end of the third grade, students are aware of the importance of the conventions of language. Third graders understand the importance of spelling and the importance of correct language.

Third-grade responses to questions are more logically developed as students show evidence of expanding language with increased vocabulary and a wider range of language structures. Third graders are aware of the many registers of language, and they become flexible in their ability to vary language patterns in both speaking and writing. These students are ready to engage in abstract discussions as they respond to text and to life experiences. Students also write in a variety of genres.

Reading

Reading, writing, speaking, and listening skills are necessary tools for effective communication. The mastery of these skills is essential for enrichment and lifelong learning. Several years of research has yielded much information about how children learn to read. This research tells us that to become more skilled and confident readers over time, students need multiple opportunities to build essential skills. In their formative years of instruction, children must be read to and provided opportunities to practice independent reading. Children must develop their ability to read with fluency and understanding in order to build their knowledge of the world.

FLUENCY

ELA3R1 The student demonstrates the ability to read orally with speed, accuracy, and expression. The student

a. Applies letter-sound knowledge to decode quickly and accurately.
b. Reads familiar text with expression.
c. Reads third-grade texts at a target rate of 120 words correct per minute.
d. Uses self-correction when subsequent reading indicates an earlier misreading within grade-level text.

VOCABULARY

ELA3R2 The student acquires and uses grade-level words to communicate effectively. The student

a. Reads literary and informational texts and incorporates new words into oral and written language.
b. Uses grade-appropriate words with multiple meanings.
c. Recognizes and applies the appropriate usage of homophones, homographs, antonyms, and synonyms.
d. Identifies the meaning of common idioms and figurative phrases and incorporates them into oral and written language.
e. Identifies and infers meaning from common root words, common prefixes (e.g., un-, re-, dis-, in-), and common suffixes (e.g., -tion, -ous, -ly).
f. Determines the meaning of unknown words on the basis of context.

COMPREHENSION

ELA3R3 The student uses a variety of strategies to gain meaning from grade-level text. The student

a. Reads a variety of texts for information and pleasure.
b. Makes predictions from text content.

c. Generates questions before, during, and after reading.
d. Distinguishes fact from opinion.
e. Recognizes plot, setting, and character within text, and compares and contrasts these elements between texts..
f. Makes judgments and inferences about setting, characters, and events and supports them with evidence from the text.
g. Summarizes text content.
h. Interprets information from illustrations, diagrams, charts, graphs, and graphic organizers.
i. Makes connections between texts and/or personal experiences.
j. Identifies and infers main idea and supporting details.
k. Self-monitors comprehension to clarify meaning.
l. Identifies and infers cause-and-effect relationships and draws conclusions.
m. Recalls explicit facts and infers implicit facts.
n. Identifies the basic elements of a variety of genres (fiction, non-fiction, drama, and poetry).
o. Uses titles, tables of contents, and chapter headings to locate information quickly and accurately and to preview text.
p. Recognizes the author's purpose.
q. Formulates and defends an opinion about a text.
r. Applies dictionary, thesaurus, and glossary skills to determine word meanings.

Writing

The student writes clear, coherent text that develops a central idea or tells a story. The writing shows consideration of the audience and purpose. The student progresses through the stages of the writing process (e.g., prewriting, drafting, revising, and editing).

ELA3W1 The student demonstrates competency in the writing process. The student
a. Captures a reader's interest by setting a purpose and developing a point of view.
b. Begins to select a focus and an organizational pattern based on purpose, genre, expectations, audience, and length.
c. Writes text of a length appropriate to address the topic or tell the story.
d. Uses organizational patterns for conveying information (e.g., chronological order, cause and effect, similarity and difference, questions and answers).
e. Begins to use appropriate structures to ensure coherence (e.g., transition words and phrases, bullets, subheadings, numbering).
f. Begins to use specific sensory details (e.g., strong verbs, adjectives) to enhance descriptive effect.
g. Begins to develop characters through action and dialogue.
h. Begins to use descriptive adjectives and verbs to communicate setting, character, and plot.
i. Begins to include relevant examples, facts, anecdotes, and details appropriate to the audience.

j. Uses a variety of resources to research and share information on a topic.
k. Writes a response to literature that demonstrates understanding of the text, formulates an opinion, and supports a judgment.
l. Writes a persuasive piece that states a clear position.
m. Pre-writes to generate ideas, develops a rough draft, rereads to revise, and edits to correct.
n. Publishes by presenting an edited piece of writing to others.

ELA3W2 The student writes in a variety of genres, including narrative, informational, persuasive, and response to literature.

The student produces a narrative that:
a. Captures a reader's interest by writing both personal and fantasy/imaginary stories, setting a purpose, and developing a point of view.
b. Sustains a focus.
c. Includes the appropriate purpose, expectations, and length for the audience and genre.
d. Uses sensory details and other literary language to communicate setting, characters, and plot.
e. Uses appropriate organizational structures to ensure coherence (well developed beginning, middle, and end, and sequence of events) and strategies (transition words/phrases, time cue words, and sequence of events).
f. Develops characters through action and dialogue.
g. Provides a sense of closure.
h. May include pre-writing.
i. May include a revised and edited draft.
j. May be published.

The student produces informational writing (e.g., procedures, report, correspondence) that:
a. Captures a reader's interest by setting a purpose and developing a point of view.
b. Sustains a focused topic.
c. Includes the appropriate purpose, expectations, and length for the audience and the genre.
d. Includes relevant examples, facts, anecdotes, and details.
e. Uses organizational structures for conveying information (chronological order, cause and effect, similarities and differences, questions and answers).
f. Uses a variety of resources (encyclopedia, Internet, books) to research and share information on a topic.
g. Provides a sense of closure.
h. May include prewriting.
i. May include a draft that is revised and edited.
j. May be published.

The student produces a persuasive piece of writing that:

a. Captures a reader's interest by stating a clear position/opinion and developing a point of view.
b. Sustains a focus.
c. Includes the appropriate purpose, expectations, and length for audience and the genre.
d. Adds supportive details throughout the paper that may include relevant examples, facts, and anecdotes.
e. Uses appropriate organizational structures to ensure coherence (introduction, body, conclusion) and appropriate formats (speech, brochure, advertisement, movie and book reviews).
f. Provides a sense of closure.
g. May include pre-writing.
h. May include a revised and edited draft.
i. May be published.

The student produces a response to literature that:

a. Captures a reader's interest by developing a point of view.
b. Demonstrates understanding of the text, formulates an opinion, and supports a judgment.
c. Makes connections: text-to-self, text-to-text, text-to-world connections using significant details from the reading selection.
d. Uses appropriate organizational structures to ensure coherence (T-charts, compare and contrast, letter to author, rewrite the ending, beginning, middle, and end with details from the text).
e. Provides a sense of closure.
f. May include pre-writing.
g. May include a draft that is revised and edited.
h. May be published.

Conventions

Conventions are essential for reading, writing, and speaking. Instruction in language conventions will, therefore, occur within the context of reading, writing, and speaking, rather than in isolation. The student writes to make connections with the larger world. A student's ideas are more likely to be taken seriously when the words are spelled accurately and the sentences are grammatically correct. Use of Standard English conventions helps readers understand and follow the student's meaning, while errors can be distracting and confusing.

ELA3C1 The student demonstrates understanding and control of the rules of the English language, realizing that usage involves the appropriate application of conventions and grammar in both written and spoken formats. The student

a. Correctly identifies and uses subject/verb agreement and adjectives.
b. Identifies and uses nouns (singular, plural, possessive) correctly.

c. Identifies and uses contractions correctly.
d. Identifies and uses personal and possessive pronouns.
e. Speaks and writes in complete and coherent sentences.
f. Identifies and uses increasingly complex sentence structure.
g. Distinguishes between complete and incomplete sentences.
h. Demonstrates knowledge of when to use formal or informal language exchanges (e.g., slang, colloquialisms, idioms).
i. When appropriate, determines the meaning of a word based on how it is used in an orally presented sentence.
j. Uses resources (encyclopedias, Internet, books) to research and share information about a topic.
k. Uses the dictionary and thesaurus to support word choices.
l. Uses common rules of spelling and corrects words using dictionaries and other resources.
m. Uses appropriate capitalization and punctuation (end marks, commas, apostrophes, quotation marks).
n. Writes legibly in cursive, leaving space between letters in a word and between words in a sentence.

Listening/Speaking/Viewing

The student demonstrates an understanding of listening, speaking, and viewing skills for a variety of purposes. The student listens critically and responds appropriately to oral communication in a variety of genres and media. The student speaks in a manner that guides the listener to understand important ideas.

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.

K-12 Mathematics Introduction

The Georgia Mathematics Curriculum focuses on actively engaging the students in the development of mathematical understanding by using manipulatives and a variety of representations, working independently and cooperatively to solve problems, estimating and computing efficiently, and conducting investigations and recording findings. There is a shift towards applying mathematical concepts and skills in the context of authentic problems and for the student to understand concepts rather than merely follow a sequence of procedures. In mathematics classrooms, students will learn to think critically in a mathematical way with an understanding that there are many different ways to a solution and sometimes more than one right answer in applied mathematics. Mathematics is the economy of information. The central idea of all mathematics is to discover how knowing some things well, via reasoning, permit students to know much else—without having to commit the information to memory as a separate fact. It is the connections, the reasoned, logical connections that make mathematics manageable. As a result, implementation of Georgia's Performance Standards places a greater emphasis on problem solving, reasoning, representation, connections, and communication.

Georgia Mathematics Performance Standards
Grade 3

By the end of grade three, students will understand place value. They will further develop their understanding and their skills with addition and subtraction of whole numbers and decimals. They will also expand their knowledge base of multiplication and division of whole numbers. Students will understand the concepts of length, perimeter, area, and time. Students will broaden their understanding of characteristics of previously studied geometric figures. They will solve problems by collecting, organizing, displaying, and interpreting data.

Instruction and assessment should include the use of manipulatives and appropriate technology. Topics should be represented in multiple ways including concrete/pictorial, verbal/written, numeric/data-based, graphical, and symbolic. Concepts should be introduced and used in the context of real world phenomena.

Concepts / Skills to Maintain
Comparison of numbers
Addition & subtraction of multi-digit numbers
Length (cm, m, in, ft, yd) and time
Geometric shapes
Make change
Area models (arrays) of multiplication

NUMBER AND OPERATIONS

Students will use decimal fractions and common fractions to represent parts of a whole. They will also understand the four arithmetic operations for whole numbers and use them in basic calculations, and apply them in problem solving situations.

M3N1. Students will further develop their understanding of whole numbers and decimals and ways of representing them.

a. Identify place values from tenths through ten thousands.
b. Understand the relative sizes of digits in place value notation (10 times, 100 times, 1/10 of a single digit whole number) and ways to represent them including word name, standard form, and expanded form.

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.
d. Model addition and subtraction by counting back change using the fewest number of coins.

M3N3. Students will further develop their understanding of multiplication of whole numbers and develop the ability to apply it in problem solving.

a. Describe the relationship between addition and multiplication, i.e. multiplication is defined as repeated addition.
b. Know the multiplication facts with understanding and fluency to 10 x 10.
c. Use arrays and area models to develop understanding of the distributive property and to determine partial products for multiplication of 2- or 3-digit numbers by a 1-digit number.
d. Understand the effect on the product when multiplying by multiples of 10.
e. Apply the identity, commutative, and associative properties of multiplication and verify the results.
f. Use mental math and estimation strategies to multiply.
g. Solve problems requiring multiplication.

M3N4. Students will understand the meaning of division and develop the ability to apply it in problem solving.

a. Understand the relationship between division and multiplication and between division and subtraction.
b. Recognize that division may be two situations: the first is determining how many equal parts of a given size or amount may be taken away from the whole as in repeated subtraction, and the second is determining the size of the parts when the whole is separated into a given number of equal parts as in a sharing model.

c. Recognize problem-solving situations in which division may be applied and write corresponding mathematical expressions.
d. Explain the meaning of a remainder in division in different circumstances.
e. Divide a 2 and 3-digit number by a 1-digit divisor.
f. Solve problems requiring division.
g. Use mental math strategies to divide.

M3N5. Students will understand the meaning of decimal fractions and common fractions in simple cases and apply them in problem-solving situations.
a. Identify fractions that are decimal fractions and/or common fractions.
b. Understand that a decimal fraction (i.e. 3/10) can be written as a decimal (i.e. 0.3).
c. Understand the fraction *a/b* represents *a* equal sized parts of a whole that is divided into *b* equal sized parts.
d. Know and use decimal fractions and common fractions to represent the size of parts created by equal divisions of a whole.
e. Understand the concept of addition and subtraction of decimal fractions and common fractions with like denominators.
f. Model addition and subtraction of decimal fractions and common fractions with like denominators.
g. Use mental math and estimation strategies to add and subtract decimal fractions and common fractions with like denominators.
h. Solve problems involving decimal fractions and common fractions with like denominators.

MEASUREMENT

Students will understand and measure time and length. They will also model and calculate perimeter and area of simple geometric figures.

M3M1. Students will further develop their understanding of the concept of time by determining elapsed time of a full, half, and quarter-hour.

M3M2. Students will measure length choosing appropriate units and tools.
a. Use the units kilometer (km) and mile (mi.) to discuss the measure of long distances.
b. Measure to the nearest ¼ inch, ½ inch and millimeter (mm) in addition to the previously learned inch, foot, yard, centimeter, and meter.
c. Estimate length and represent it using appropriate units.
d. Compare one unit to another within a single system of measurement.

M3M3. Students will understand and measure the perimeter of geometric figures.
a. Understand the meaning of the linear unit and measurement in perimeter.
b. Understand the concept of perimeter as being the length of the boundary of a geometric figure.

c. Determine the perimeter of a geometric figure by measuring and summing the lengths of the sides.

M3M4. Students will understand and measure the area of simple geometric figures (squares and rectangles).

a. Understand the meaning of the square unit and measurement in area.
b. Model (by tiling) the area of a simple geometric figure using square units (square inch, square foot, etc.).
c. Determine the area of squares and rectangles by counting, addition, and multiplication with models.

GEOMETRY

Students will further develop their understanding of characteristics of previously studied geometric figures.

M3G1. Students will further develop their understanding of geometric figures by drawing them. They will also state and explain their properties.

a. Draw and classify previously learned fundamental geometric figures and scalene, isosceles, and equilateral triangles.
b. Identify and compare the properties of fundamental geometric figures.
c. Examine and compare angles of fundamental geometric figures.
d. Identify the center, diameter, and radius of a circle.

ALGEBRA

Students will understand how to express relationships as mathematical expressions.

M3A1. Students will use mathematical expressions to represent relationships between quantities and interpret given expressions.

a. Describe and extend numeric and geometric patterns.
b. Describe and explain a quantitative relationship represented by a formula (such as the perimeter of a geometric figure).
c. Use a symbol, such as □ and Δ, to represent an unknown and find the value of the unknown in a number sentence.

DATA ANALYSIS AND PROBABILITY

Students will gather, organize, and display data and interpret graphs.

M3D1. Students will create and interpret simple tables and graphs.

a. Solve problems by organizing and displaying data in charts, tables, and graphs.
b. Construct and interpret line plot graphs, pictographs, Venn diagrams, and bar graphs using scale increments of 1, 2, 5, and 10.

Process Skills

Each topic studied in this course should be developed with careful thought toward helping every student achieve the following process standards.

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.

M3P2. Students will reason and evaluate mathematical arguments.

a. Recognize reasoning and proof as fundamental aspects of mathematics.
b. Make and investigate mathematical conjectures.
c. Develop and evaluate mathematical arguments and proofs.
d. Select and use various types of reasoning and methods of proof.

M3P3. Students will communicate mathematically.

a. Organize and consolidate their mathematical thinking through communication.
b. Communicate their mathematical thinking coherently and clearly to peers, teachers, and others.
c. Analyze and evaluate the mathematical thinking and strategies of others.
d. Use the language of mathematics to express mathematical ideas precisely.

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.

The following terms and symbols are often misunderstood. These concepts are not an inclusive list and should not be taught in isolation. However, due to evidence of frequent difficulty and misunderstanding associated with these concepts, instructors should pay particular attention to them and how their students are able to explain and apply them.

The definitions are for teacher reference only and are not intended to be memorized by students. Teachers should present these concepts to students with models and real life examples. Students should understand the concepts involved and be able to recognize and/or demonstrate them with words, models, pictures, or numbers.

Terms / Symbols:
quotient, whole number, decimal point, place value of 1/10 (tenth), numerator, denominator, second (unit of time), ÷, x, decimal fraction, common fraction, elapsed time, scalene triangle, isosceles triangle, equilateral triangle, bar graph, mile, kilometer, center, diameter, radius, line plot graph

Third Grade Science Curriculum

The Georgia Performance Standards are designed to provide students with the knowledge and skills for proficiency in science at the third grade level. The Project 2061's *Benchmarks for Science Literacy* is used as the core of the curriculum to determine appropriate content and process skills for students. The GPS is also aligned to the National Research Council's *National Science Education Standards*. Technology is infused into the curriculum. The relationship between science, our environment, and our everyday world is crucial to each student's success and should be emphasized.

The performance standards should drive instruction. Hands-on, student-centered, and inquiry-based approaches should be the emphases of instruction. This curriculum is intended as a required curriculum that would show proficiency in science, and instruction should extend beyond the curriculum to meet the student needs. Safety of the student should always be foremost in science instruction.

Science consists of a way of thinking and investigating, as well a growing body of knowledge about the natural world. To become literate in science, therefore, students need to acquire an understanding of both the **Characteristics of Science** and its **Content**. The Georgia Performance Standards for Science require that instruction be organized so that these are treated together. Therefore, **A CONTENT STANDARD IS NOT MET UNLESS APPLICABLE CHARACTERISTICS OF SCIENCE ARE ALSO ADDRESSED AT THE SAME TIME.** For this reason they are presented as co-requisites.

The Performance Standards include four major components. They are

The Standards for Georgia Science Courses. The Characteristics of Science co-requisite standards are listed first, followed by the Content co-requisite standards. Each Standard is followed by elements that indicate the specific learning goals associated with it.

Tasks that students should be able to perform during or by the end of the course. These are keyed to the relevant Standards. Some of these can serve as activities that will help students achieve the learning goals of the Standard. Some can be used to assess student learning, and many can serve both purposes.

Samples of student work. As a way of indicating what it takes to meet a Standard, examples of successful student work are provided. Many of these illustrate how student work can bridge the Content and Characteristics of Science Standards. The Georgia DOE Standards web site will continue to add samples as they are identified and teachers are encouraged to submit examples from their own classroom experiences.

Teacher Commentary. Teacher commentary is meant to open the pathways of communication between students and the classroom teacher. Showing students why they did or did not meet a standard enables them to take ownership of their own learning.

Georgia Performance Science Standards-- Explanation of Coding

Characteristics of Science Standards

SKCS1
Science **K**indergarten **C**haracteristics of **S**cience Standard #**1**

S8CS2
Science Grade **8** **C**haracteristics of **S**cience Standard #**2**

SCSh8
Science **C**haracteristics of **S**cience **h**igh school Standard #**8**

Content Standards

S5P3
Science Grade **5** **P**hysical Science Standard #**3**

S4E2
Science Grade **4** **E**arth Science Standard #**2**

S7L4
Science Grade **7** **L**ife Science Standard #**4**

SC1
Science **C**hemistry Standard #**1**

SB4
Science **B**iology Standard #**4**

SPS6
Science **P**hysical **S**cience Standard #**6**

SP3
Science **P**hysics Standard #**3**

Third grade students keep records of observations without making alterations. They add and subtract whole numbers mentally, on paper, and with a calculator. They observe, construct, and measure objects using ordinary hand tools. Third graders observe things with many parts and describe the ways in which the parts influence or interact with one another. They represent objects in the real world with geometric figures, number sequences, graphs, diagrams, maps, and stories. They explain how the representations do not match their real world counterparts. Third graders know that safety is a fundamental concern in all experimental science. They adhere to safety rules and guidelines.

Form and Function

Third grade students observe and compare objects and use the information they obtain to answer their own questions. Their communication skills allow them to record findings and analyze data. They understand that the form or shape of an object is frequently related to use, operation or function. They will use this information to explain rock cycles, features of plants and animals, heat energy, and magnetic force.

Major Concepts/Skills	**Concepts/Skills to Maintain**
Earth Science	Habits of Mind:
Rocks and minerals of Georgia	Records investigations
Soils	Analyzes whole number data
Weathering	Measures
Fossils	Makes sketches
Physical Science	Compares and describes numerically
Heat energy	Researches
Magnets	Uses tools
Life Science	Answers their own questions
Habitats	Communicates findings
Features of organisms of Georgia	Understands safety concerns
Pollution and conservation	

Co-Requisite - Characteristics of Science

Habits of Mind

S3CS1. Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

a. Keep records of investigations and observations and do not alter the records later.
b. Offer reasons for findings and consider reasons suggested by others.
c. Take responsibility for understanding the importance of being safety conscious.

S3CS2. 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 commonly encountered fractions – halves, thirds, and fourths (but not sixths, sevenths, and so on) – in scientific calculations.
c. Judge whether measurements and computations of quantities, such as length, weight, or time, are reasonable answers to scientific problems by comparing them to typical values.

S3CS3. Students will use tools and instruments for observing, measuring, and manipulating objects in scientific activities utilizing safe laboratory procedures.
a. Choose appropriate common materials for making simple mechanical constructions and repairing things.
b. Use computers, cameras and recording devices for capturing information.
c. Identify and practice accepted safety procedures in manipulating science materials and equipment.

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.

S3CS5. Students will communicate scientific ideas and activities clearly.
a. Write instructions that others can follow in carrying out a scientific procedure.
b. Make sketches to aid in explaining scientific procedures or ideas.
c. Use numerical data in describing and comparing objects and events.
d. Locate scientific information in reference books, back issues of newspapers and magazines, CD-ROMs, and computer databases.

S3CS6. Students will question scientific claims and arguments effectively.
a. Support statements with facts found in books, articles, and databases, and identify the sources used.

The Nature of Science

S3CS7. Students will be familiar with the character of scientific knowledge and how it is achieved.

Students will recognize that:
a. Similar scientific investigations seldom produce exactly the same results, which may differ due to unexpected differences in whatever is being investigated, unrecognized differences in the methods or circumstances of the investigation, or observational uncertainties.
b. Some scientific knowledge is very old and yet is still applicable today.

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.

Co-Requisite - Content

Earth Science

S3E1. Students will investigate the physical attributes of rocks and soils.

a. Explain the difference between a rock and a mineral.
b. Recognize the physical attributes of rocks and minerals using observation (shape, color, texture), measurement, and simple tests (hardness).
c. Use observation to compare the similarities and differences of texture, particle size, and color in top soils (such as clay, loam or potting soil, and sand).
d. Determine how water and wind can change rocks and soil over time using observation and research..

S3E2. Students will investigate fossils as evidence of organisms that lived long ago.

a. Investigate fossils by observing authentic fossils or models of fossils or view information resources about fossils as evidence of organisms that lived long ago.
b. Describe how a fossil is formed.

Physical Science

S3P1. Students will investigate how heat is produced and the effects of heating and cooling, and will understand a change in temperature indicates a change in heat.

a. Categorize ways to produce heat energy such as burning, rubbing (friction), and mixing one thing with another.
b. Investigate how insulation affects heating and cooling.
c. Investigate the transfer of heat energy from the sun to various materials.
d. Use thermometers to measure the changes in temperatures of water samples (hot, warm, cold) over time.

S3P2. Students will investigate magnets and how they affect other magnets and common objects.

a. Investigate to find common objects that are attracted to magnets.
b. Investigate how magnets attract and repel each other.

Life Science

S3L1. Students will investigate the habitats of different organisms and the dependence of organisms on their habitat.

a. Differentiate between habitats of Georgia (mountains, marsh/swamp, coast, Piedmont, Atlantic Ocean) and the organisms that live there.
b. Identify features of green plants that allow them to live and thrive in different regions of Georgia.
c. Identify features of animals that allow them to live and thrive in different regions of Georgia.
d. Explain what will happen to an organism if the habitat is changed.

S3L2. Students will recognize the effects of pollution and humans on the environment.

a. Explain the effects of pollution (such as littering) to the habitats of plants and animals.
b. Identify ways to protect the environment.
    - Conservation of resources
    - Recycling of materials

Grade Three

OUR DEMOCRATIC HERITAGE

In third grade, students conclude their introduction to United States history by studying the origins of American democracy. The historical strand compares ancient Greek democracy in Athens with that of the United States, and introduces selected Americans who have been important in ensuring our rights. The geography strand relates primarily to the people discussed in the history strand. In the government strand, students begin the study of the foundations of a republican form of government. The economics strand continues the introduction of basic economics concepts.

Historical Understandings

SS3H1 The student will explain the political roots of our modern democracy in the United States of America.

a. Identify the influence of Greek architecture (columns on the Parthenon, U. S. Supreme Court building), law, and the Olympic Games on the present.
b. Explain the ancient Athenians' idea that a community should choose its own leaders.
c. Compare and contrast Athens as a direct democracy with the United States as a representative democracy.

SS3H2 The student will discuss the lives of Americans who expanded people's rights and freedoms in a democracy.

a. Paul Revere (independence), Frederick Douglass (civil rights), Susan B. Anthony (women's rights), Mary McLeod Bethune (education), Franklin D. Roosevelt (New Deal and World War II), Eleanor Roosevelt (United Nations and human rights), Thurgood Marshall (civil rights), Lyndon B. Johnson (Great Society and voting rights), and César Chávez (workers' rights).
b. Explain social barriers, restrictions, and obstacles that these historical figures had to overcome and describe how they overcame them.

Geographic Understandings

SS3G1 The student will locate major topographical features.

a. Identify major rivers of the United States of America: Mississippi, Ohio, Rio Grande, Colorado, Hudson.
b. Identify major mountain ranges of the United States of America: Appalachian, Rocky.
c. Locate the Equator, Prime Meridian, and lines of latitude and longitude on a globe.
d. Locate Greece on a world map.

SS3G2 The student will describe the cultural and geographic systems associated with the historical figures in SS3H2a.

a. Identify on a political map specific locations significant to the life and times of these historical figures.
b. Describe how place (physical and human characteristics) had an impact on the lives of these historical figures.
c. Describe how each of these historical figures adapted to and was influenced by his/her environment.
d. Trace examples of travel and movement of these historical figures and their ideas across time.
e. Describe how the regions in which these historical figures lived affected their lives and had an impact on their cultural identification.

Government/Civic Understandings

SS3CG1 The student will explain the importance of the basic principles that provide the foundation of a republican form of government.

a. Explain why in the United States there is a separation of power between branches of government and levels of government.
b. Name the three levels of government (national, state, local) and the three branches in each (executive, legislative, judicial), including the names of the legislative branch (Congress, General Assembly, county commission or city council).
c. State an example of the responsibilities of each level and branch of government.

SS3CG2 The student will discuss the character of different historical figures in SS3H2a.

a. Describe how the different historical figures in SS3H2a display positive character traits of cooperation, diligence, courage, and leadership.
b. Explain how the historical figures in SS3H2a used positive character traits to support their beliefs in liberty, justice, tolerance, and freedom of conscience and expression.
c. Explain how the historical figures in SS3H2a chose when to respect and accept authority.

Economic Understandings

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)

SS3E2 The student will explain that governments provide certain types of goods and services in a market economy, and pay for these through taxes and will describe services such as schools, libraries, roads, police/fire protection, and military.

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.

SS3E4 The student will describe the costs and benefits of personal spending and saving choices.

Social Studies Skills Matrices

MAP AND GLOBE SKILLS

GOAL: The student will use maps to retrieve social studies information.
I: indicates when a skill is introduced in the standards and elements as part of the content
D: indicates grade levels where the teacher must develop that skill using the appropriate content
M: indicates grade level by which student should achieve mastery, the ability to use the skill in all situations
A: indicates grade levels where students will continue to apply and improve mastered skills

Map and Globe Skills	K	1	2	3	4	5	6	7	8	9-12
1. use cardinal directions	I	M	A	A	A	A	A	A	A	A
2. use intermediate directions		I	M	A	A	A	A	A	A	A
3. use a letter/number grid system to determine location			I	M	A	A	A	A	A	A
4. compare and contrast the categories of natural, cultural, and political features found on maps			I	M	A	A	A	A	A	A
5. use inch to inch map scale to determine distance on map			I	M	A	A	A	A	A	A
6. use map key/legend to acquire information from, historical, physical, political, resource, product and economic maps			I	D	M	A	A	A	A	A
7. use a map to explain impact of geography on historical and current events			I	D	M	A	A	A	A	A
8. draw conclusions and make generalizations based on information from maps				I	M	A	A	A	A	A
9. use latitude and longitude to determine location				I	D	D	D	M	A	A
10. use graphic scales to determine distances on a map					I	M	A	A	A	A
11. compare maps of the same place at different points in time and from different perspectives to determine changes, identify trends, and generalize about human activities					I	M	A	A	A	A
12. compare maps with data sets (charts, tables, graphs) and /or readings to draw conclusions and make generalizations					I	M	A	A	A	A

INFORMATION PROCESSING SKILLS

GOAL: The student will be able to locate, analyze, and synthesize information related to social studies topics and apply this information to solve problems/make decisions.
I: indicates when a skill is introduced in the standards and elements as part of the content
D: indicates grade levels where the teacher must develop that skill using the appropriate content
M: indicates grade level by which student should achieve mastery, the ability to use the skill in all situations
A: indicates grade levels where students will continue to apply and improve mastered skills

Information Processing Skills	K	1	2	3	4	5	6	7	8	9-12
1. compare similarities and differences	I	D	M	A	A	A	A	A	A	A
2. organize items chronologically	I	D	D	M	A	A	A	A	A	A
3. identify issues and/or problems and alternative solutions	I	D	D	D	D	M	A	A	A	A
4. distinguish between fact and opinion		I	D	M	A	A	A	A	A	A
5. identify main idea, detail, sequence of events, and cause and effect in a social studies context		I	D	D	M	A	A	A	A	A
6. identify and use primary and secondary sources		I	D	D	M	A	A	A	A	A
7. interpret timelines		I	D	D	M	A	A	A	A	A
8. identify social studies reference resources to use for a specific purpose			I	M	A	A	A	A	A	A
9. construct charts and tables			I	M	A	A	A	A	A	A
10. analyze artifacts			I	D	D	M	A	A	A	A
11. draw conclusions and make generalizations				I	M	A	A	A	A	A
12. analyze graphs and diagrams				I	D	M	A	A	A	A
13. translate dates into centuries, eras, or ages				I	D	M	A	A	A	A
14. formulate appropriate research questions					I	M	A	A	A	A
15. determine adequacy and/or relevancy of information					I	M	A	A	A	A
16. check for consistency of information					I	M	A	A	A	A
17. interpret political cartoons					I	D	D	D	M	A

THIRD GRADE

PE3.1: Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities.

Description: Students demonstrate mature form in all locomotor and non-locomotor movement patterns while participating in small-sided games, body control (e.g., gymnastics, inline skating) and rhythmic activities (e.g., structured dance, jump rope, creative dance). They are able to perform variations of different locomotor skills (e.g., jumping for height and distance; skipping at different speeds). By the end of third grade, students will be able to demonstrate all striking and throwing patterns. Students can catch a moving object from a high trajectory in non-game play environments and are able to catch objects at a medium level trajectory during game play.

Elements:

a. Demonstrates fleeing, dodging, and chasing skills during game play.
Examples:
- Demonstrates the ability to dodge an opponent while playing tag.
- Catches an opponent who is dribbling a soccer ball.

b. Demonstrates weight transfer when using equipment.
Examples:
- Demonstrates the proper technique of a cross lateral (body) release when throwing a Frisbee.
- Demonstrates stepping with opposition when throwing, using a sidearm pattern.

c. Demonstrates movement skills and patterns following specific rhythms.
Examples:
- Performs a ball routine consisting of a bounce, pass, and catch with a partner in rhythm to music.
- Jumps rope repetitively.

d. Demonstrates correct form while performing a side swing strike using a short handled or long handled implement.
Examples:
- Uses a level sidearm swing while striking an object with a bat.
- Uses a backhand swing with a paddle.

THIRD GRADE

PE3.2: Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.

Description: Students use external feedback to improve performance.

Elements:

a. Identifies the critical elements of a mid-level strike.
Examples:
- Describes the key components of a mid-level strike.
- Performs a forehand strike with proper form.

b. Identifies the critical elements of a successful pass to a moving target.
Examples:
- Using proper form, students throw to a swinging target and hit it.
- Students explain the major factors of a successful pass to a partner.

c. Identifies the critical elements of a successful catch.
Examples:
- Uses proper form when catching a softball thrown by a partner.
- Names the cues that remind us how to make a successful catch.

d. Explains how force moves objects to varying distances.
Examples:
- Kicks a ball using light force, medium force, and hard force to discover the distance the ball travels at each force level.
- Compares the distance traveled of a lightly thrown ball to a ball thrown as hard as possible.

e. Explains rules of a modified game.
Examples:
- Explains the rule to the game to someone that was absent.
- Lists three rules of his favorite game.

THIRD GRADE

PE3.3: Participates regularly in physical activity.

Description: Students will be able to identify and/or demonstrate the importance of regular physical activity for enjoyment and health.

Elements:

a. Chooses to participate in structured and/or non-structured physical activities.
Examples:
- Actively involved in class activities without prompting.
- Participates in family physical recreation.

b. Provides evidence of participation in formal and/or informal physical activities.
Examples:
- Provides documentation of Youth League, YMCA, Boys and Girls Clubs.
- Attends physical fitness night at school with family.

THIRD GRADE

PE3.4: Achieves and maintains a health-enhancing level of physical fitness.

Description: Students begin to participate in physical activity specifically related to each component of physical fitness and are able to identify which components are impacted by the various activities (cardio-respiratory endurance, muscular strength, muscular endurance, and flexibility).

Elements:

a. Participates in moderate to vigorous activities for at least 20 minutes.
Examples:
- Plays a small sided soccer game.
- Jumps rope continuously for more than one minute and repeats.

b. Identifies at least 2 activities for each component of health related fitness.
Examples:
- Recognizes that gymnastics/tumbling improves flexibility and muscular strength.
- Demonstrates activities related to each component.
- Recognizes that cardio-vascular endurance is important while playing vigorous activities. (Ex. Small-sided basketball).

c. Recognizes physiological indicators that accompany vigorous physical activities.
Examples:
- Checks resting heart rate before vigorous activity.
- Identifies heart rate for 15 seconds multiplied by 4 heart beats to heart beat per minute after vigorous activity.
- Compares and recognizes the difference between resting heart rate and the heart rate after vigorous activity.

d. Participates in activities that benefit each of the health-related fitness components.
Examples:
- Climbs the rock wall in physical education class to improve muscular strength.
- Recognizes that stretching after the muscles are warm is more beneficial than stretching before exercising.
- Participates in fitness stations to prepare for fitness testing.

THIRD GRADE

PE3.5: Exhibits responsible personal and social behavior that respects self and others in physical activity settings.

Description: Students demonstrate an understanding of rules, directions, and safety procedures and work cooperatively and respectfully with others, regardless of personal differences. Students begin to take responsibility for their actions and begin to show understanding of how their actions can affect the success of the group.

Elements:

a. Designs and follows class rules and procedures.
Examples:
- Creates class rules with teacher's assistance.
- Develops procedures for dividing into equal groups.

b. Demonstrates the ability to work successfully with a partner or with a small group.
Examples:
- Makes positive statements to others during activity.
- Works well in both "leadership" and "following" roles.

c. Recognizes and avoids unsafe practices and situations.
Examples:
- Cautions others when an unsafe situation occurs.
- Rolls in the same direction as others in tumbling during a unit.

d. Works independently to practice skills.
Examples:
- Practices specific skills assigned by the teacher until the teacher signals the end of practice.
- Practices skill during non-structured time without being told.

THIRD GRADE

PE3.6: Values physical activity for health, enjoyment, challenge, self expression, and/or social-interaction.

Description: Students are able to recognize physical activity as a positive opportunity for group and social interaction.

Elements:

a. Chooses to participate in partner or team activities.
Examples:
- Works with a partner to develop passing skills.
- Provides evidence of participation in team sport.

b. Participates in cooperative problem solving activities.
Examples:
- Leads a team as members attempt to complete a team challenge.
- Provides ideas for solving a team challenge.

c. Demonstrates a healthy approach to results of group activities.
Examples:
- Celebrates success of self and/or others in the proper context.
- Encourages students that are having a difficult time completing task.