Fifth Grade Curriculum Overview

Reading:

I. Reading with Stamina and Meaning

- Readers read easy text with understanding.
- Readers read a lot of text with stamina.
- Readers read with fluency
- Readers read with friends.
- Readers celebrate reading.
- Readers read in a way that allows them to retell.
- Readers hold themselves accountable when reading.
- Readers read with stamina for test-taking purposes.

II. Fiction Texts

- Readers can navigate through a text before, during, and after reading by implementing reading strategies.
- Readers can understand story elements: characterization, plot, and setting.
- Readers can identify the theme of a narrative.
- Readers can identify conflict in a narrative.
- Readers can identify literary devices and their purpose as they are used in narratives.
- Readers can identify voice, tone, and mood as well as author's purpose in narrative and poetry.
- Readers can identify the various types of genre in fiction.

III. Responding to Fiction

- Readers think and grow ideas as they read.
- Readers are aware that they connect emotionally with the text as they read.
- Readers formulate questions while they read.
- Readers write to respond to text.
- Readers talk to respond to text.
- Readers use writing and conversations as tools to follow and extend trails of thought.
- Readers think, write, and talk about a variety of types of text.

IV. Nonfiction

- When starting a new nonfiction text, readers must engage in initial comprehension strategies.
- Prior to reading, readers must activate strategies for understanding vocabulary.
- While reading nonfiction, readers use self-monitoring comprehension strategies.
- Readers demonstrate an understanding and interpretation of nonfiction text.
- Readers read with fluency to better understand what they read.
- Readers utilize strategies to get through the hard parts of a nonfiction text.

V. Responding to Nonfiction

- Readers use conversation to respond to text(s) to follow and extend their thinking.
- Readers use writing to respond to text(s) to follow and extend their thinking.
- Readers think, write, and talk about texts of varying structures.
- Readers synthesize concepts to lead them to larger ideas and themes.
- Readers determine relevancy and credibility of sources.

VI. Developing and Extending Understanding

- 1. Readers use conversation (talking and listening) to deepen thinking and enhance learning.
- 2. Readers integrate and synthesize ideas across parts of a text as they talk together.
- 3. Readers use the text to support their conversation and thinking.
- 4. Readers respond critically to the text through conversation.
- 5. Readers select a variety of reading materials for conversations.
- 6. Readers reflect on their conversations about books.

VII. Reading as a Test Genre

- 1. Readers prepare for testing all year long by linking test talk and test-taking strategies within the Reading Workshop.
- 2. Readers learn to think of "testing" as a *genre*, distinguished by characteristics of form, style, and content.
- 3. Readers learn strategies for taking tests, understanding the differences between general reading strategies and test-specific strategies.
- 4. Readers learn about different kinds of test questions/formats and how to answer them correctly.
- 5. Readers, knowing the different kinds of questions that appear on tests, discover that the same general reading strategies they have learned in Reading Workshop can help them take tests.
- 6. Readers take tests seriously, know they are important, and do their very best.

Writing:

I. Launching the Writing Workshop

- Writers view themselves as writers with something to say.
- Writers learn how to use a writer's notebook.
- Writers choose topics that are important to them.
- Writers learn and use the writing process.
- Writers need instruction and adequate time to develop habits that nurture independence.
- Writers thrive in a safe learning community.
- Writers celebrate their writing success.

II. Raising the Quality of Narrative Writing

- Writers study texts that resemble the sort of thing they hope to write.
- Writers draw on strategies they already know and learn new strategies for generating personal narratives.
- Writers select a seed idea, learning how to lift it beyond what they've already written and rehearse for the draft that they will soon write.
- Writers understand that narratives have a focus that asks, "What am I really trying to say?"
- Writers draw on a growing repertoire of strategies for adding content to their stories.
- Writers craft leads and endings.
- Writers learn strategies to confer with partners.
- Writers revise in light of their focus and edit drafts drawing on all they've learned.
- Writers celebrate their success.
- Writers learn how to write a narrative for a writing prompt.

III. Informational Writing

- Writers study texts that resemble the sort of thing they hope to write.
- Writers generate ideas and select a topic.
- Writers go back into notebooks to write about their topic to discover what they know and what they want to say about it.
- Writers understand that an informational text makes a point.
- Writers plan and organize their informational text by selecting details that support their point.
- Writers draw on a growing repertoire of strategies for adding content to their informational texts.
- Writers craft leads (introductions) and endings (conclusions).
- Writers organize their information to create an interesting and informative text.
- Writers learn strategies to confer with partners.
- Writers revise in light of their focus and edit drafts drawing on all they've learned.
- Writers celebrate their writing success.
- Writers learn how to write an informational essay for a writing prompt.

IV. Persuasive Writing:

- Writers study texts that resemble the sort of thing they hope to write.
- Writers generate ideas and select a topic.
- Writers go back into notebooks to write about what they believe about their issue.
- Writers understand that persuasive writing is controlled by a single point of view.
- Writers plan their persuasive texts by selecting details that support their points of view
- Writers draw on a growing repertoire of strategies for adding content to their persuasive texts.
- Writers understand that persuasive texts have a unique structure.
- Writers learn strategies to confer with partners.
- Writers revise in light of their focus and edit drafts drawing on all they've learned.
- Writers celebrate their writing success.
- Writers learn how to write a persuasive essay for a writing prompt.

V. Poetry:

- Poets know that poetry comes from the heart, growing from the writer's passions and interests.
- Poets must read and collect LOTS of poetry before writing poetry themselves.
- Poets paint a picture with their words.
- Poets learn to revise and edit as they write.
- Poets celebrate their writing success.

Spelling & Writing Conventions:

Capital Letters:

- Beginning of sentences
- Proper nouns
- Book titles

Punctuation:

- Ending punctuation—question marks, periods, and exclamation marks
- Commas—dates, letter writing, and list in a series
- Quotation marks in dialogue

Spelling Strategies & Patterns: From the Sitton and Zaner-Bloser Spelling Curricula

- Homophones
- Silent "e"
- ie and ei
- possessives
- Endings: ed, tion, cian
- Plurals: changing "y" to "i" and "f" to "v"
- Suffixes: ant, ary, ish
- Prefixes: per, pre, pro, bi, tri, mid, semi
- Long vowel sounds
- R-controlled vowels: er, ir, and ur
- Compound words
- Root words
- K sound: c, k, ck

See also the eligible content from the most recent PSSA Anchors

Handwriting:

The goal of handwriting instruction is to enable students to produce legible writing in a reasonable amount of time. We believe the best instructional technique is the "motion model" accompanied by guided practice. This model requires the teacher to **demonstrate** the motor tasks involved in correctly producing each letter, and to monitor students' attempts to write.

- The Zaner-Bloser simplified cursive alphabet will be introduced and taught during the first semester of third grade. Beginning in the second semester of the third grade year, consistent use of cursive will be expected for tests, final drafts, and other handwritten published pieces. Additional instruction of cursive handwriting will be provided to individuals, small groups, and/or the whole class based upon the results of ongoing assessment in the fourth and fifth grades. Consistent use of cursive will be expected for tests, final drafts, and other handwritten pieces.
- Continued guided practice of the manuscript alphabet for use in appropriate situations, such as graphs, posters, applications, forms, etc., will be given to students in the third, fourth, and **fifth** grades.

Math:

Taken from the Fifth Grade Everyday Math goal sheet:

Number and Numeration (PA Standard 2.1)

- Understand the meanings, uses, and representations of numbers.
 - 1. Read and write whole numbers and decimals; identify places in such numbers and the values of the digits in those places; use expanded notation to represent whole numbers and decimals.
 - 2. Solve problems involving percents and discounts; describe and explain strategies used; identify the unit whole in situations involving fractions.
 - 3. Identify prime and composite numbers; factor numbers; find prime factorizations.
- Understand equivalent names for numbers.
 - 4. Use numerical expressions involving one or more of the basic four arithmetic operations, grouping symbols, and exponents to give equivalent names for whole numbers; convert between base-10, exponential, and repeated-factor notations.

5. Use numerical expressions to find and represent equivalent names for fractions, decimals, and percents; use and explain multiplication and division rules to find equivalent fractions and fractions in simplest form; convert between fractions and mixed numbers; convert between fractions, decimals, and percents.

• Understand common numerical relations.

6. Compare and order rational numbers; use area models, benchmark fractions, and analyses of numerators and denominators to compare and order fractions and mixed numbers; describe strategies used to compare fractions and mixed numbers.

Operations and Computation (PA Standard 2.2)

• Compute accurately.

- 1. Use mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the addition and subtraction of whole numbers, decimals, and signed numbers; describe the strategies used and explain how they work.
- 2. Demonstrate automaticity with multiplication facts and proficiency with division facts and fact extensions.
- 3. Use mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the multiplication of whole numbers and decimals and the division of multidigit whole numbers and decimals by whole numbers; express remainders as whole numbers or fractions as appropriate; describe the strategies used and explain how they work.
- 4. Use mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the addition and subtraction of fractions and mixed numbers; describe the strategies used and explain how they work.
- 5. Use area models, mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the multiplication of fractions and mixed numbers; use diagrams, a common-denominator method, and calculators to solve problems involving the division of fractions; describe the strategies used.

• Make reasonable estimates.

6. Make reasonable estimates for whole number and decimal addition, subtraction, multiplication, and division problems and fraction and mixed number addition and subtraction problems; explain how the estimates were obtained.

• Understand meanings of operations.

7. Use repeated addition, arrays, area, and scaling to model multiplication and division; use ratios expressed as words, fractions, percents, and with colons; solve problems involving ratios of parts of a set to the whole set.

Data and Chance (PA Standard 2.6)

• Select and create appropriate graphical representations of collected or given data.

1. Collect and organize data or use given data to create bar, line, and circle graphs with reasonable titles, labels, keys, and intervals.

• Analyze and interpret data.

2. Use the maximum, minimum, range, median, mode, and mean, and graphs to ask and answer questions, draw conclusions, and make predictions.

• Understand and apply basic concepts of probability.

- 3. Describe events using *certain*, *very likely*, *likely*, *unlikely*, *very unlikely*, *impossible* and other basic probability terms; use *more likely*, *equally likely*, *same chance*, *50-50*, *less likely*, and other basic probability terms to compare events; explain the choice of language.
- 4. Predict the outcomes of experiments, test the predictions using manipulatives, and summarize the results; compare predictions based on theoretical probability with experimental results; use summaries and comparisons to predict future events; express the probability of an event as a fraction, decimal, or percent.

Measurement and Reference Frames (PA Standard 2.3)

- Understand the systems and processes of measurement; use appropriate techniques, tools, units and formulas in making measurements.
 - 1. Estimate length with and without tools; measure length to the nearest 1/8 inch and millimeter; estimate the measure of angles with and without tools; use tools to draw angles with given measures.
 - 2. Describe and use strategies to find the perimeter of polygons and the area of circles; choose and use appropriate formulas to calculate the areas of rectangles, parallelograms, and triangles, and the volume of a prism; define pi as the ratio of a circle's circumference to its diameter.
 - 3. Describe relationships among U.S. customary units of length; among metric units of length; and among U.S. customary units of capacity.

• Use and understand reference frames.

4. Use ordered pairs of numbers to name, locate, and plot points in all four quadrants of a coordinate grid.

Geometry (PA Standard 2.9)

- Investigate characteristics and properties of 2- and 3-dimensional geometric shapes.
 - 1. Identify, describe, compare, name and draw right, acute, obtuse, straight, and reflex angles; determine angle measures in vertical and supplementary angles and by applying properties of sums of angle measures in triangles and quadrangles.
 - 2. Describe, compare, and classify plane and solid figures using appropriate geometric terms; identify congruent figures and describe their properties.
- Apply transformations and symmetry in geometric situations.
 - 3. Identify, describe, and sketch examples of reflections, translations, and rotations.

Patterns, Functions, and Algebra (PA Standard 2.8)

- Understand patterns and functions.
 - 1. Extend, describe, and create numeric patterns; describe rules for patterns and use them to solve problems; write rules for functions involving the four basic arithmetic operations; represent functions using words, symbols, tables, and graphs and use those representations to solve problems.
- Use algebraic notation to represent and analyze situations and structures.
 - 2. Determine whether number sentences are true or false; solve open number sentences and explain the solutions; use a letter variable to write an open sentence to model a number story; use a pan-balance model to solve linear equations in one unknown.
 - 3. Evaluate numeric expressions containing grouping symbols and nested grouping symbols; insert grouping symbols and nested grouping symbols to make number sentences true; describe and use the precedence of multiplication and division over addition and subtraction.
 - 4. Describe and apply properties of arithmetic.

Science:

Variables: This unit consists of four investigations that help students discover relationships through controlled experimentation. Students will fling, float, fly and flip objects as they discover relationships in each investigation. Students will:

- gain experience with the concept of variable.
- gain experience with the concept of system.
- design and conduct controlled experiments.
- construct materials that will be used in the investigations.

- acquire some understanding of the behavior of pendulums.
- gain experience with buoyancy.
- use data to make predictions.
- apply mathematics in the context of science.
- record and graph data concretely, pictorially, and symbolically to discover relationships.
- acquire the vocabulary associated with controlled experimentation.
- use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, organizing, and relating.

Environments: All living things depend on the conditions in their environment. The study of the relationships between one organism and its environment builds knowledge of all organisms. With this knowledge comes an awareness of limits. Changes in an environment can be hard on organisms. Such knowledge is important because humans can change environments. To do so without awareness of possible consequences can lead to disasters. The six investigations in this unit will introduce students to these basic concepts in environmental biology.

- Develop an attitude of respect and understanding for life.
- Gain experience with the major environmental factors in terrestrial and aquatic systems.
- Conduct controlled experiments with plants to determine ranges of tolerance.
- Determine an organism's optimum conditions and environmental preferences.
- Organize and analyze data from experiments and investigations with plants and animals.
- Observe and describe changes in complex systems over time.
- Relate laboratory studies to natural systems.
- Apply mathematics in the context of science.
- Acquire vocabulary associated with environmental biology.
- Exercise language, math, and social studies skills in the context of biology investigations.
- Use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, organizing, and relating.

Mixtures & Solutions: Chemistry is the study of the structure of matter and the changes or transformations that take place in it. Learning about the makeup of substances gives us knowledge about how things go together and how they can be taken apart. Learning about changes in substances is important for several reasons: changes can be controlled to produce new materials; changes can be used to give off energy to run machines. This unit has four investigations that introduce students to these fundamental ideas in chemistry.

- Gain experience with the concepts of mixture and solution.
- Gain experience with the concepts of concentration and saturation.
- Gain experience with the concept of chemical reaction.
- Apply an operational definition to determine the relative concentrations of solutions.
- Use group problem-solving techniques to plan investigations.
- Use measurement in the context of scientific investigations.
- Apply mathematics in the context of science.
- Acquire vocabulary associated with chemistry and the periodic table.
- Be introduced to the concept that all matter is made of very small particles called atoms and that atoms combine to form molecules.
- Use scientific thinking processes to conduct investigations and build explanations: observing, communicating, comparing, organizing, and relating.

Environment & Ecology: (a required unit for all fifth graders)

Cycles:

- Within an aquatic ecosystem, there is a complex arrangement of various living and nonliving cycles.
- Important biotic and abiotic factors are recycled on earth through the water, nutrient, and carbon dioxide/oxygen cycles. Many other natural cycles exist.
- There are similarities and differences between natural cycles and recycling performed by people. People recycle materials such as paper, plastic, and metals in order to conserve natural resources.
- A watershed is an area of land that drains water into a system of streams and rivers. People can affect it.

Skills include:

- Students describe and explain the water, nutrient, CO/O cycles in a pond environment.
- Students compare similarities and differences between natural cycles and human recycling.
- Students discuss conservation of natural resources.

Key PSSA vocabulary for Science and Environment & Ecology: Physical properties, chemical properties, control group, hypothesis, solutions (solute, solvent, dilute, concentrate), suspensions, life cycle, interdependency, nutrients, observation, microscope pieces (nose, body, stage clip, diaphragm, etc.), consumer, decomposer, ecosystems, endangered species, watershed, renewable resources, non-renewable resources, wetlands, pollution

Social Studies:

Assessments: (first two required; select third assessment from final two marked with an *)

- Explorer's Village
- Events Leading up to the American Revolution
- *Colonial America Reflection
- *Early Settlements (Jamestown, Roanoke, Plymouth)

Explorers:

- Explorers braved the unknown, motivated by "Gold," "God," and "Glory."
- Explorers and their discoveries influenced the world around them.

Early Settlements:

- Settlers based their decisions on the successes or failures of earlier settlements.
- Early settlers had a better chance of success when they organized their settlements using rules.

Colonial America:

- Colonists adapted to life in Colonial America based on their location.
- Colonists' daily lives were vastly different than life today.

American Revolution:

- Conflict between the colonies and Britain escalated in the 1700s leading to the American Revolution.
- There were a variety of influences on the outcome of the American Revolution.

Government:

• Delegates in charge of creating the new government based their decisions on their experience with Great Britain's government.

Westward Expansion: (optional)

• Early pioneers were motivated to move westward by new opportunities.

• Pioneers experienced various obstacles as they moved west.

Native Americans: (optional)

- People migrated in search of basic survival needs.
- Where people decided to settle influenced their culture (food, shelter, clothing, special customs/religion, etc.)

Character Education:

• SASD Character Education Curriculum: Respect, Citizenship, Responsibility, Fairness, Caring (Gratitude), Trustworthiness(Honesty), Perseverance, Wisdom & Humility