



Fourth Grade Curriculum Guide

Our Mission as a friends School: Quaker Beliefs, History and Practice

A handbook of the curriculum will always be a ‘work in progress,’ a phrase that describes many aspects of schools with dynamic vision. We invite your comments so that we can continue to provide a clear and useful guide.

The curriculum at The Friends School of Atlanta is guided by the mission statement, which embodies Friends values (testimonies), and by developmentally appropriate practice. We believe that in educating children we are guiding them toward an awareness and appreciation of their own uniqueness. For this reason, our curriculum is concerned with all aspects of human development: intellectual, moral, aesthetic, physical, social and emotional. The process by which children learn is as important to us as what they learn.

Academic excellence is the ultimate goal, as we help each child discover the full range of their abilities. Teaching new ideas and skills helps us attain that goal by providing a link between the child’s present interests and abilities and his or her innate capacities.

We want our students to appreciate that knowledge and understanding open countless possibilities for their lives. In the words of William Damon, Professor at Brown University, and nationally renowned thinker on the moral development of children:

Children do best—intellectually, personally, morally—when they are striving for excellence. Any activity that encourages children to strive for excellence will enhance their motivation to learn, and any instruction that shows them how to achieve excellence will advance their competence. Children are inspired, not stressed, when faced with challenging tasks. They crave the chance to achieve something meaningful.

Students will learn about

- The six Quaker testimonies, Simplicity, Peace, Integrity, Community, Equality, Stewardship (SPICES), orally and through art and literature
- The purpose of Silent Meeting
- The “inner light” or “that of God” in each of us

Students will have opportunities to experience and practice

SILENCE

- Have strategies for settling into silence
- Use silence to regain balance
- Use silence to reflect
- Use silence as part of conflict resolution
- Understand silence as something other and more than the absence of sound

SIMPLICITY

- Recognize that sometimes the simple solution can be the best solution and learn to look for the simple solution

PEACE

- Identify the physical and emotional feelings of being at peace
- Identify forces or influences that erode personal peace
- Know and use strategies to restore personal peace
- Use “I” statements in negotiating conflict
- Listen without interruption to someone else’s story/perspective
- Take responsibility for one’s words and actions
- Make and accept apologies
- Seek help at the appropriate time
- Walk away to disengage

INTEGRITY

- Show awareness of one's "healthy core" of good feelings, making good choices and understanding ourselves and others through actions, speaking and art
- Recognize the connection and/or gap between personal values and actions
- Take responsibility for one's words and actions
- Embrace the courage to tell the truth regardless of consequences

COMMUNITY

- Make agreements for peaceable cooperation within a community
- Problem-solve with the needs of the group in mind along with the needs of the self
- Act to assist and/or care for people in need

EQUALITY

- Know how to respond when people are put-down or called names

STEWARDSHIP

- Make use of daily habits that maintain the school facility and materials

The Early Elementary Schooling Approach

Using developmentally appropriate practice, teachers allow children time to grow, explore, and discover. Our program meets varied learning styles by integrating a traditional learning model, in which teachers present skills, information and ideas directly to students, with a progressive model, in which teachers engage students in activities and processes to strengthen the child's abilities and skills. In a supportive and noncompetitive atmosphere, children develop as writers, speakers, readers and thinkers. Students conduct research, calculate, experiment, compute and solve problems. Our classrooms and outdoor gardens and habitat provide a stimulating environment so that experiential learning can take place.

Our curricula progress through a recurring spiral movement; that is, students are introduced to a broad range of topics, materials and skills, through which they cycle several times. In math, for instance, students work with geometrical and algebraic concepts at the same time as they learn arithmetical facts.

The curriculum allows them to spiral around through these concepts again and again while developing proficiency. In science, students may use the same skills in different units and in successive years, but expectations of breadth, depth and performance are different. At specified places and times in the program, teachers know when to expect proficiency of particular skills.

The advantages of this approach within developmentally appropriate practice are numerous. It allows for more individualized instruction, since students can follow the spiral and develop at their own pace. For some, the light bulb will glow the first time through the unit, for others the third, for others, the fifth. For the student who has the "aha" experience the first time around, the next time, more challenging objectives are presented and expectations for that student are greater. This approach allows for a more coherent learning experience, because the unit can develop in an inclusive and connected fashion, rather than through isolated learning blocks. And this model more closely resembles how a person actually learns, which is through immersion, assimilation and adaptation while scaffolding new concepts and information.

True to Quaker educational practice, a spiraling curriculum can be forgiving and noncompetitive. The nature of the world we live in requires that our students learn the value of cooperation and collaboration. We encourage them to learn from one another by working together on projects, by answering classmates' questions and by listening to opinions, ideas and beliefs of others. The Friends School of Atlanta wants students to understand and

that they are positive and powerful individuals living constructively within a community of learners.

In sum, as the school seeks to support the Quaker values of peace and equality, we are led to strive for diversity in its student body, faculty and staff. This belief calls for the community's continued support for and understanding of the impact that such diversity has on communications, teacher practice and student learning and curriculum development. We resonate with the words of the late Ernest Boyer, President of the Carnegie Foundation for the Advancement of Teaching, and a prominent Quaker educator, in his last book, *The Basic School*:

The most essential ingredient of an effective school—the one idea that holds it all together—is best described by the simple word "connections." An effective school connects people, to create community. An effective school connects curriculum to achieve coherence. An effective school connects classrooms and resources to enrich the climate. An effective school connects life to build character.

Academic Subjects

Language Arts

Text Selection

Textbooks

Handwriting Without Tears, Grade 4

Benchmark Writer's Workshop, Grade 4

Friend's Values

Friends' values and FSA's mission reverberate through the language arts curriculum, promoting self-esteem and honor and respect for the voices, talents and styles of each student to realize Friends' belief in the unique worth and value of each individual. The values of equality and community guide the selection of texts, themes and materials used in classrooms. Teachers make sure that literature represents a variety of voices in our culture in order to reflect the diversity of cultures within our community as well as to encourage students to develop a global view of culture. Teachers are content conscious when choosing literature for students to read or to put in classroom and school libraries. Teachers carefully review in advance content that depicts or sanctions violence, disrespect or inequalities among people, genders, ethnic or racial groups and sometimes reject texts for these reasons. Or, teachers may decide to use a provocative text as a teaching tool to encourage students to thoughtfully consider and clarify values or to focus on creating the kind of world that would not harbor violence. Friends' values encourage a climate of respect for each child's developing voice. Paula Lawrence Wehmiller, former principal of the lower school at Wilmington Friends School, writes: "Here at a Friends school, there is a place for the expression of the spirit. It is available to teachers and to children to cope with the unexplained, the mysterious, the larger forces at work in our lives (from "The Miracle of the Bread Dough Rising")." Finally, at the Friends School of Atlanta, teachers frequently model for students how to honor other students' work and ideas, in accordance with Friends' values of integrity and equality. Listening respectfully, offering comments in a positive way and not comparing work with another student are all strategies that we commonly use in our classrooms to honor each person's thoughts, feelings and work.

Key Content Themes

The mission of the language arts program is for children to become confident and capable communicators through effective writing, reading, listening and speaking. We fulfill this mission by building on students' talents, interests and experiences and providing opportunities for building proficiency of basic skills. We honor each child by individualizing expectations through differentiation of instruction and assessment, by incorporating high interest, culturally diverse literature and by recognizing a variety of communication styles. We aspire to instill in each learner a love of language that sustains a lifelong process of learning. The Friends School of Atlanta approaches a language arts curriculum through a balanced language program that includes phonics instruction and rich language experiences. Developmentally appropriate instruction forms the core of the program. Skill-based activities and opportunities for dramatics and public speaking are provided to help students develop excellence in writing, reading, listening and speaking. The entire school strives to be a print-rich environment, with labels, posters and teacher- and child-made writings decorating the walls and class libraries. The Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects inform our practice.

Learning Objectives

The traditional skills of reading, listening, speaking and language arts (writing, spelling, grammar and handwriting) are taught in a developmentally appropriate manner to meet the varying levels of ability in each class. In the course of a day, students are involved in reading and language-based activities for as much as three hours, with specific instruction ranging from an hour to an hour and a half.

Reading

Friends School of Atlanta has adopted a balanced approach for teaching reading. We teach beginning readers the foundational tools they will need in order to be a strong reader. These include practicing phonemic awareness skills such as rhyming, blending sounds, segmenting sounds and phonics-based skills such as letter-sound correspondence, decoding, encoding, and sight word recognition. Emergent readers also learn other strategies, such as context, syntax and picture clues, to decipher unknown words. Fluency in reading is a developing reading skill beginning in the early years. A typical reading period begins with a mini-lesson that introduces a specific skill, concept or strategy followed by a period of independent, paired or small group reading with a teacher instruction. Teachers may use mini-lessons to expose students to literature groups to allow students to share comprehension skills, new ideas, new vocabulary and elements of style.

Students will:

- Develop a love of reading and books
- Read every day at school
- Cultivate a knowledge and enjoyment of many types of literature: fiction, nonfiction, poetry, essays, biography, folktales, legends, myths, mysteries and plays
- Become proficient readers
- Develop comprehension abilities and critical and analytical skills to learn to read for information

Speaking

Effective speaking techniques are brought into the curriculum through opportunities to develop conversation, poetry reading, dramatic activities and public speaking. Students view the classroom as a place to share and collaborate, generating many opportunities for verbal interaction. Students learn how to be responsive listeners and speakers. Clarity of speech and focus of thought are emphasized. Dramatic or thematic celebrations provide a more public venue for showcasing verbal expression skills and students take pride in their accomplishments before an audience of other classes and/or parents. Some classrooms begin the day with singing, which develops a child's ear for musical language as well as the speaking qualities of rhythm, inflection, volume, articulation and pacing. Tone of voice, volume, pacing and inflection are speaking skills taught at various points in the elementary program, with a view toward truthful and kind communication

Students will:

- Use speech to vocalize needs and communicate effectively and appropriately in different situations
- Learn oral language skills including articulation, inflection, volume and tone of voice
- Express ideas, thoughts and opinions in discussions
- Be provided opportunities for experiential learning through a range of expressive roles: retelling stories, reciting poetry, role-playing, group and individual oral reading, dramatics, oral presentations and public speaking

Listening

Throughout the day, students are actively learning about the power of language. Listening to others opinions and learning to comprehend oral material are accomplished through group discussion and written reflection. Sequence of events, details about setting, plot and characters and point of view are encouraged by asking students to recall and retell what they have heard or read. Cooperative work in small and large groups encourages listening to and negotiating or accepting another point of view as students find ways to move ahead with their projects.

Students will:

- Use active listening skills with peers and adults in small and large group settings
- Use listening activities to develop an appreciation for point of view, perspective, oral literature and shared writing
- Use listening to follow directions and to develop attention span

Language Arts, Writing, Spelling, and Handwriting

The Kindergarten through fourth grades unify the teaching of grammar, usage and mechanics with the Benchmark Writer's Workshop. The content spirals from one grade level to the next, with new information expanding on previously learned material. The curriculum supports students at all stages of writing from the beginning writer to the more advanced writer. Teachers guide students in the writing process through modeling. Mini lessons are presented to help the students learn how to create, organize and communicate ideas. Books are read to provide examples of the types of writing with the goal of aiding students in generating thoughts and ideas. Writing is a regular part of all curricular areas to encourage students to consider themselves writers and authors. Writing activities include writing down one's thoughts and feelings in a journal; writing to record information about a unit of study, story or activity in which students participated; and research-based writing. Writing is a fluid, inventive process. Students developing writing skills rarely move from one discrete stage of the process to another and often do not go through each stage with every piece of writing. The Friends School of Atlanta uses what is known among educators as the **process-writing approach with 5 stages: pre-writing, drafting, revising, and editing, and publishing**. Spelling is an integral part of writing and language arts. Our youngest children begin writing creatively using inventive or temporary spellings to facilitate fluency. Temporary spellings allow children to write down the sounds of the words they don't know without losing track of their thoughts. Beginning in first grade, students are introduced to conventional spelling rules and word patterns along a developmental continuum from vowel sounds to classical roots and affixes. We teach handwriting (Pre-K through fourth) with the **Handwriting Without Tears** © curriculum.

Students will:

- Think of themselves as writers and authors
- Use a process approach when writing and publishing
- Use grammatical constructions and spelling rules through interest-based and skill-focused writing
- Feel a sense of ownership and authorship through a “real-world” product (i.e. individual or group publication)
- Practice writing on selected topics after researching (reading for information)

SKILLS

Reading

Reading Foundational Skills

Students will:

Phonics and Word Recognition

- Knowing and applying grade level phonics and word analysis skills in decoding words
 - Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multi-syllabic words in context and out of context

Fluency

- Reading with sufficient accuracy and fluency to support comprehension
 - Read on-level text with purpose and understanding
 - Read on-level text orally with accuracy, appropriate rate and expression on successive readings
 - Use context and/or pictures to confirm or self-correct word recognition and understanding, rereading as necessary
 - Read on-level prose and poetry orally with accuracy, appropriate rate and expression on successive readings

Comprehension for Literature

Key Ideas and Details

- Read closely to determine what the text says explicitly and to make logical inferences in it; cite specific textual evidence when writing or speaking to support conclusions drawn from text.
 - Referring to details and examples in a text when explaining what the text says explicitly and when drawing inferences from a text

- Determine central ideas or themes of a text and analyze their development; summarize the key supporting ideas and details.
 - Determining a theme from a story, drama or poem from details in the text; summarizing the text (developing)
- Analyze how and why individuals, events and ideas develop over the course of a text.
 - Describing in depth a character, setting or event in a story or drama, drawing on specific details in a text (e.g., a character's thoughts, words or actions)

Craft and Structure

- Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone
 - Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean)
- Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
 - Explaining major differences between drama, poems and prose, and referring to the structural elements of poems (e.g., verse, rhythm, meter) and dramas (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text
- Assess how point of view or purpose shapes the content and style of a text.
 - Compare and contrast the point of view from which different stories are narrated, including the difference between first-and third- person narrations

Integration of Knowledge and Ideas

- Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
 - Making connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text
- Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
 - Comparing and contrasting the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures (developing)

Range of Reading and Level of Text complexity

- Read and comprehend complex literary and informational texts independently and proficiently.
 - By the end of the year, reading and comprehending literature, including stories, dramas and poetry in the grade 4-5 text complexity band proficiently with scaffolding as needed in the high end of the range

Comprehension for Informational Text Key Ideas and Details

- Read closely to determine what the text says explicitly and to make logical inferences in it; cite specific textual evidence when writing or speaking to support conclusions drawn from text.
 - Referring to details and examples in a text when explaining what the text says explicitly and when drawing inferences from a text
- Determine central ideas or themes of a text and analyze their development; summarize the key supporting ideas and details.
 - Determining the main idea of a text, explaining how it is supported by the key details; summarizing the text (developing)
- Analyze how and why individuals, events and ideas develop over the course of a text.
 - Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text

Craft and Structure

- Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone
 - Determining the meaning of general academic and domain-specific words and phrases in a text relevant to grade level specific topic or subject area
- Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
 - Describing the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts or information in a text or part of a text
- Assess how point of view or purpose shapes the content and style of a text.
 - Compare and contrast a first hand and a second hand account of the same event of topic; describe the differences in focus and the information provided

Integration of Knowledge and Ideas

- Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
 - Interpreting information presented visually, orally or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages), explaining how the information contributes to an understanding of the text in which it appears
- Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
 - Explaining how an author uses reasons and evidence to support specific points in text
- Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
 - Integrating information from two texts on the same topic in order to write or speak knowledgeably about the subject

Range of Reading and Level of Text complexity

- Read and comprehend complex literary and informational texts independently and proficiently.
 - By the end of the year reading and comprehending informational texts including history/social studies, science, and technical texts in the grade 4-5 text complexity band with scaffolding as needed in the high end of the range

See Scope and Sequence Reading Chart, Addendum A for more information on Pre-K through 4th grades.

Language Arts

Students will:

Conventions of Standard English

- **Conventions of Standard English**

- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - Use frequently occurring nouns and verbs.
 - Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes).
 - Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).
 - Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).
 - Produce and expand complete sentences in shared language activities.
 - Print all upper- and lowercase letters.
 - Use common, proper, and possessive nouns.
 - Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop).
 - Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their, anyone, everything).
 - Use verbs to convey a sense of past, present, and future (e.g., Yesterday I walked home; Today I walk home; Tomorrow I will walk home).
 - Ensure subject-verb and pronoun-antecedent agreement.*¹
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - Recognize and name end punctuation.
 - Write a letter or letters for most consonant and short-vowel sounds (phonemes).
 - Spell simple words phonetically, drawing on knowledge of sound-letter relationships.
 - Use end punctuation for sentences.
 - Use commas in dates and to separate single words in a series.
 - Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.
 - Use commas in greetings and closings of letters.
 - Use an apostrophe to form contractions and frequently occurring possessives.
 - Generalize learned spelling patterns when writing words (e.g., cage → badge; boy → boil).
 - Use commas in addresses.
 - Form and use possessives.

¹ *Beginning in grade 3, skills and understandings that are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking are marked with an asterisk (*).

- Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., sitting, smiled, cries, happiness).
- Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words.
- Use correct capitalization.
- Use commas and quotation marks to mark direct speech and quotations from a text.
- Use a comma before a coordinating conjunction in a compound sentence.
- Spell grade-appropriate words correctly, consulting references as needed.

Knowledge of Language

- Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
 - Compare formal and informal uses of English.
 - Choose words and phrases for effect.*
 - Recognize and observe differences between the conventions of spoken and written standard English.
 - Choose words and phrases to convey ideas precisely.*
 - Choose punctuation for effect.*
 - Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).

Vocabulary Acquisition and Use

- Appropriate to grade level determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
 - Identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck.)
 - Use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word
 - Use sentence-level context as a clue to the meaning of a word or phrase.
 - Use frequently occurring affixes as a clue to the meaning of a word.
 - Identify frequently occurring root words (e.g., look) and their inflectional forms (e.g., looks, looked, looking).
 - Use sentence-level context as a clue to the meaning of a word or phrase.
 - Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat).

- Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion).
- Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.
- Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph).
- Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of keywords and phrases.
- Demonstrate understanding of word relationships and nuances in word meanings.
 - Distinguish shades of meaning among closely related verbs (e.g., toss, throw, hurl) and closely related adjectives (e.g., quick, fast, speedy, rapid etc).
 - Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., take steps).
 - Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful).
 - Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew, believed, suspected, heard, wondered).
 - Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context
 - Recognize and explain the meaning of common idioms, adages, and proverbs.
 - Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings
 - (synonyms).
- Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.
 - Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).

See Scope and Sequence Language Arts Chart, Addendum B for more information Pre-K through 4th.

Writing

Writing Genres

Book Reviews

- Analyzes and evaluates the characters, plot, and ideas
- Gives their own opinion about books strengths and weaknesses
- Identifies the intended audience for the book

Informational Reports

- Create strong openings that hook the reader
- Ensures information is accurate through fact checking
- Uses multiple perspectives to encourage the reader to draw his/her own conclusions.
- Writes strong endings that keep readers thinking

Science Fiction

- Imagines the effect of science and technology on people and society
- Includes elements that are based on scientific fact
- Chooses a realistic, fantastic, or futuristic setting
- Decides the tone of the story

Personal Narratives

- Focuses on one particular incident in personal life
- Includes specific details about the time, place, and people involved
- Includes dialog
- Portrays the thoughts and feelings of the author

Production and Distribution of Writing

- Produce clear and coherent writing in which the development and organization are appropriate to task purpose, and audience²
- Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
 - With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising and editing. (Editing for conventions should demonstrate command of language standards in previous grades and up to and including grade 3 or grade 4 as appropriate)
- Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others. (FSA introduces this skill in 4th grade.)
 - With guidance and support, use technology including the Internet to produce and publish writing, as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting

Research to Build and Present Knowledge

- Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
 - Conduct short research projects that build knowledge through investigation of different aspect of a topic
- Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source and integrate the information while avoiding plagiarism.
 - Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources
- Draw evidence from literary or informational texts to support analysis, reflection, and research
 - Draw information from literary or informational texts to support analysis, reflection and research

Range of Writing

- Write routinely over extended time frames (time for research, reflection and revisions) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

See Scope and Sequence Writing Chart, Addendum C, for more information for Pre-K through 4th.

Speaking and Listening

Students will:

Comprehension and Collaboration

- Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
 - Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners about grade 4 topics and texts, building on others' ideas and expressing their own clearly
 - Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion
 - Follow agreed-upon rules for discussions and carry out assigned roles
 - Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others
 - Review the key ideas expressed and explain their own ideas and understanding in light of the discussion

2 Grade specific expectations for writing types are defined in the first three standards (marked with a black dot).

- Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively and orally.
 - Paraphrase portions of a text read aloud or information presented in diverse media and formats including visually, quantitatively, and orally
- Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.
 - Identify the reasons and evidence the speaker provides to support particular points

Presentation of Knowledge and Ideas

- Present information, findings and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
 - Report on a topic or text, tell a story or recount an experience in an organized manner with appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace
- Make strategic use of digital media and visual displays of data to express information and enhance understandings of presentations
 - Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes (Developing)
- Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate
 - Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small group discussion); use formal English when appropriate to tasks and situation. (Developing) (See grade 4 Language standards for specific expectations.)

See Scope and Sequence Speaking and Listening Chart, Addendum D for more information about Pre-K through 4th.

Mathematics

Everyday Mathematics curriculum developed by the University of Chicago (published by Wright Group/McGraw Hill) is used in elementary from Pre-Kindergarten through Grade 4. It is research-based and extensively field-tested. Information about the research can be found on the program's [website](#). The curriculum is developmental and emphasizes real-world problem-solving and complex topics at all grade levels. The curriculum is taught through six strands: **Number and Numeration, Operations and Computation, Data and Chance, Measurement, Geometry and Patterns.**

This program is in its fourth edition (2011-12) and follows standards developed by the **National Council of Teachers of Mathematics (NCTM)**. Some of the characteristics of this program we find compelling are its developmental nature, its spiraling curriculum, its emphasis on the language of math and its provision for many kinds of activities to meet students' varied learning styles, all characteristics that dovetail with the school's mission.

Process

The aim of mathematics at the elementary level is to give shape and form to the intuitive mathematics knowledge that each student brings to school. Instruction builds on prior knowledge and everyday experiences. Investigations in what might be considered advanced topics – geometry, data and statistics, algebra – begin in kindergarten and increase in complexity throughout the grades. Whole group instruction is balanced with small group activities and independent work time. Models, manipulatives, and tools help scaffold a child's learning through each concept. At the elementary level each class devotes between 3 1/2 and 4 hours per week to math activities including instruction, independent work time, morning meeting or calendar activities, creative play, other academic units, as well as mental math and math games.

In the fourth grade, students spend 45 – 50 minutes per day on math instruction, for four days and on the fifth review or use games to solidify skills. Students learn independently, with a partner, and in small groups. Each student works through a math journal based upon the lesson for the day. Journal work also includes review of skills and concepts presented in prior lessons. Journals come home at the end of the semester and year for further review and practice.

In addition, fourth grade students are provided with many math enrichment opportunities through integration with the social studies and science curricula, as well as art, music, physical education and many other real-life applications throughout a typical school day.

Textbook Selection

Textbooks

Everyday Mathematics, Grade 4, from The University of Chicago

Learning Objectives

Our goals for all students are:

- To value mathematics
- To communicate mathematically
- To reason mathematically
- To be confident in their ability to become mathematical problem solvers

Knowledge and understanding of the basic operations is as important as pattern recognition, computational ability and problem solving. *Everyday Mathematics* curriculum reinforces these by cycling through many mathematical strands sequentially. After teachers introduce a new concept or skill, students have many opportunities to practice it in a variety of contexts and using different strategies or algorithms before proficiency is expected, sometime later that year or in the next. Partner and small group learning activities encourage students to share their thinking and ideas with their peers in a cooperative learning environment. Use of manipulative materials for the youngest students allows for experiential learning. Calculator usage is taught beginning in first grade, and use of calculators adheres to guidelines set by the text and national math standards. In addition, FSA sets a goal for students to memorize math facts at age appropriate levels to increase their calculation speed and accuracy.

We challenge mathematically adept students and provide alternate strategies or remedial work for students with learning differences. Teachers regularly provide challenge or review activities during math instructional time by extending or reinforcing the lesson, providing extra materials or activities and sending work home in addition to regular assignments. Within the *Everyday Mathematics* program are several components that provide teachers and students with many options for challenge or reinforcement. First, many of the problems are open-ended, which means that more than one right answer is possible. So, students of differing abilities can be successful at their own level of understanding. Also, most of the lessons have challenging problems for advanced thinkers. Secondly, the program encourages students to try out multiple strategies for solving problems, a definite challenge. The skill of looking for and finding many ways to solve the same problem is useful later on for advanced work in math in science. Students who feel more comfortable with familiar strategies have that option, too. Thirdly, pattern recognition and use is very important in this program for speeding up the process of computation. Finally, every workbook page emphasizes variety, instead of a lot of similar problems as in some other programs. This technique allows for quick review and repetition over time and keeps problem solving from becoming tedious yet, challenges the learner to think about a variety of math ideas.

Math homework is a regular part of this curriculum, and, in fact, in the early school years, may be the only daily homework (besides independent reading). (See Parent Handbook, Section IV, for a description of homework activities and expectations by age level.) Often an assignment in the early grades asks students to engage in a particular math activity with a member(s) of the family to promote follow up, provide enrichment or involve parents in the child's education. This type of activity helps students put math ideas into words. Research shows that students who can talk "mathematics" have a better grasp of concepts and perform at higher levels than students who are not encouraged to talk about math. It is beneficial for parents to spend time listening to and working with their students on math homework. Students sometimes bring home "math boxes" as homework, pages of recently learned skills for practice. If your child has difficulty in performing the necessary operations, please write a note to the teacher explaining the difficulty so follow-up and review can happen in the classroom.

SKILLS

Numbers and Numeration

Students will:

Rote counting

- Count by tenths and hundredths

Place Value and Notation

- Read and write numbers to hundred thousand
- Investigate/identify place value to hundred thousand
- Make exchanges among place values
- Use dollars-and-cents notation
- Explores uses of decimals
- Model decimals with base-10 materials
- Identify place value in decimals through hundredth-thousandths; compare decimals
- Investigate and apply expanded notation of decimals

Meanings and Uses of Fraction

- Identify equivalent fractions
- Compare fractions
- Order fractions on a number line

Number Theory

- Find multiples of a number or the least common multiple of two numbers Equivalent Names for Whole Numbers
- Find equivalent names for numbers

- Rename fractions as decimals
- Relate fractions and decimals
- Convert between fractions, mixed numbers, decimals, and/or percents

Number Theory

- Find multiples of a number or the least common multiple of two numbers

Equivalent Names for Whole Numbers

- Find equivalent names for numbers
- Rename fractions as decimals
- relate fractions and decimals
- convert between fractions, mixed numbers, decimals, and or percents

Comparing and Ordering Numbers

- Compare numbers using $<$, $>$, and $=$ symbols
- Compare and order decimals

Operations and Computation

Students will:

Addition and Subtraction Procedures

- Use addition/subtraction algorithms
- Add/subtract using a calculator
- Solve addition/subtraction number stories
- Add/subtract multi digit whole numbers and decimals
- Use estimation or algorithms to add/subtract money amounts/decimals; make change

Multiplication/Division Facts

- Practice multiplication/division facts

Multiplication/Division Procedures

- Use mental arithmetic to multiply/divide
- Introduce several strategies to multiply and divide

Computational Estimation

- Round whole numbers to a given place
- Use estimation to multiply/divide
- Estimate costs

Measurement and Reference Frames

Students will:

Length, Weight, and Angles

- Estimate and compare lengths/heights of objects
- Draw or measure line segments to the nearest centimeter
- Measure to the nearest $\frac{1}{2}$ centimeter
- Investigate the meter
- Estimate and compare distances

Units and Systems of Measurement

- Identify equivalent metric units of length
- Convert between metric/customary measures
- Use personal references for units of length

Geometry

Students will:

Lines and Angles

- Identify and name rays

Plane and Solid Figures

- Identify properties and characteristics of polygons

Patterns, Functions, and Algebra

Students will:

- Make and complete a sequence with number line
- Solve “What’s My Rule?” problems and find a rule for a set of problems

Algebraic Notation and Solving Number Sentences

- Compare numbers using $<$, $>$, and $=$ symbols
- Determine the value of a variable
- Determine if number sentences are true or false

Order of Operations

- Apply the use of parentheses in number sentences

Science

At the heart of the science curriculum at The Friends School of Atlanta is the belief that Science learning is an active process guided by students' natural curiosity about the world. Our aim is to encourage inquiry through experiential activities and discussion, while also teaching a body of knowledge within a non-competitive developmental program that addresses the whole person and is sensitive to diverse learning styles and interests.

From Pre-Kindergarten through 8th grade, the science program addresses life sciences, earth sciences and physical sciences, integrating them as necessitated by the curriculum. Within this framework, the scientific process guides the direction of our activities: observing, recording information, predicting outcomes, forming hypotheses, experimenting and analyzing and summarizing findings. Scientific studies are naturally woven into other curricular areas through reading, writing, researching, recording, measuring, graphing, explaining and portraying results, comparing, contrasting and analyzing. In keeping with the Quaker testimonies of simplicity, peace, integrity, community, equality and stewardship, students explore the effects of their actions as individuals, families and communities on their immediate environment and the world. FSA encourages students to be mindful of the power of one to bring about change in light of scientific facts.

FSA follows the endorsement of teaching evolutionary science by the [National Science Teachers Association \(NSTA\)](#).

Elementary Science Program

The elementary school science program is informed by the Next Generation of Science Standards. Each year students in kindergarten through fourth grade work in the areas of physical sciences, life sciences, earth and space sciences and engineering, technology, and applications of science. Younger students work to recognize patterns and inquire about the world around them. Older students gather, describe, and apply information about the natural world and engineered world. Each year the skills and the information learned build upon what was learned the previous year.

Elementary classrooms also encourage daily interest in experiential science through terrariums, aquariums, classroom pets and activities such as weather observations and measurements, recycling and composting. Weekly, monthly and seasonal activities may include cooking, nature walks, bird and tree observation, creek or pond studies and planning, planting and caring for classroom and school gardens. Through unit topics and integrated studies, science is part of both academic and routine parts of the day.

Science is regularly integrated into language arts and reading. Whether during read-aloud or independent reading, books related to the science unit are incorporated into the day.

Fourth Grade Science

Habits of Mind

Students will:

- Keep records of investigations and observations.
- Offer reasons for findings and consider reasons suggested by others.
- Demonstrate safety measures and safe usage of science equipment.
- Analyze whole number data.
- Use tools for observing and measuring.
- Make sketches, graphs, and diagrams to aid in explaining observations.
- Use numerical data to compare objects and events.
- Support reasoning and observations with facts found in books, articles, and databases.

Key Content Areas: Next Generation of Science Standards

The following standards are reproduced from the NGSS list of standards. View the full list, as well as the full K-12 NGSS curriculum, [here](#).

Energy

Students who demonstrate understanding can:

- Use evidence to construct an explanation relating the speed of an object to the energy of that object.
- Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
- Ask questions and predict outcomes about the changes in energy that occur when objects collide.
- Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.

Waves and their Applications in Technologies for Information Transfer

Students who demonstrate understanding can:

- Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.

From Molecules to Organisms: Structures and Processes

Students who demonstrate understanding can:

- Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

Earth's Place in the Universe

Students who demonstrate understanding can:

- Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.

Weathering

- Demonstrate an understanding of weathering and its effects on the earth's crust
- Can explain the difference between weathering and erosion

Earth and Human Activity

Students who demonstrate understanding can:

- Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment
- Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

Engineering and Design

Students who demonstrate understanding can:

- Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

Social Studies

The social studies program at FSA is designed to balance an introduction to academic content and discipline specific skills, all undertaken through the lens of our mission as a Quaker school. Over the course of the program, students investigate themes related to geography, history, cultural studies and anthropology, government and civics, religion, economics and resources as well as current events. At FSA we have designed our program to prioritize learning how to engage in social science inquiry in the belief that students can study any area successfully so long as they have internalized the tools, processes and methods of the discipline. Students will study American history and world history again in high school, so our goal is not comprehensive coverage of these areas. Instead, our classes provide strategically-defined explorations of content areas that cast into relief the *processes* of social studies and the *role* of the social scientist in performing these processes.

Students certainly learn important and time-honored concepts that are critical to becoming intelligent and thoughtful participants in community and world affairs. But they engage the content while building proficiency, tools that can be carried into a wide variety of future courses and projects along with developing the confidence and self-awareness that will allow them effective use of those tools.

Studies of history and culture provide numerous opportunities for students to explore how human decision-making has sought to institute these values or has instead pursued outcomes that undermine these values. The testimony of integrity requires that we also confront the ways in which decision-makers may believe they seek an outcome, for example, the equitable distribution of resources, while choosing actions that actually undermine that outcome, whether through self-deception or the limitations of human understanding. Yet, what might tend toward a relentless gaze into human frailty and misdirection is redeemed by the Quakers' continual search for that of goodness or God in every individual and therefore in every decision maker.

Elementary Social Studies Program

Our aim in elementary social studies is to encourage, nurture and foster students' knowledge of the physical and social world, both past and present, by developing an awareness of how people in many communities and cultures interact with their environment, how they live and what they believe. We also seek to look at the social sciences through the lens of the distinctive experience and perspective of **Friends' principles: peace, equality, integrity, community, stewardship and simplicity.**

Teachers use a project-based approach with topics that follow developmentally appropriate practice, as well as teacher and student interests. Resources available for social studies include kits, videos, curriculum materials, resource books in the library, the Web and other software in the media lab. Teachers are also guided by Georgia performance standards in choosing units of study. The elementary topics dovetail with the middle school topics in history and geography. In the life of the school, social studies is explicitly taught during specific time periods weekly, and it figures prominently in the implicit curriculum – through routines and classroom management practices, through teacher and student language, through modeled expectations and most of all through Quaker values, such as equality /respect, community-building and peace/conflict resolution. We follow a “social curriculum,” the **Responsive Classroom** program (Northeast Foundation for Children), which emphasizes cooperative, responsible and compassionate class culture allowing all students to begin on the same page every day, ready to learn. Teachers take week-long workshops to learn how to create equitable classrooms so that knowledge about use of materials, teacher expectations and academic routines and choices are modeled and referenced from the first day of school to the last. These ideas combine well with the values of a Quaker school.

In sum, social studies is the place in school life when children are learning what it means to be a group member, as well as an individual, and how to express feelings with words in a constructive manner. Social studies are everywhere!

Social Studies Curriculum for Fourth Grade: Key Content Themes

Fourth grade social studies is a yearlong study of the rights of children. Students begin fourth grade with an overview of the differences between wants and needs. Students soon connect needs to the idea of rights. This is the jumping off point for a year of study of childrens' rights.

Throughout the first semester, students spend time, using literature, to think about children's rights. The variety of texts tell stories of children from around the world and lead our students to discover and generate their own rights. At the end of the first semester, the class is presented with the U.N. Declaration on the Rights of the Child, and it is then that fourth graders realize that they have "come up with" many if not all of the rights that the U.N. designated as essential. Students end the semester with picking a right of their choice and with a partner creating a presentation to share with other students in our school.

The second semester begins with a brief introduction to internet safety, specifically, how to conduct internet research in a safe manner. Fourth grade students quickly jump into a unit exploring Atlanta-based non-profit organizations which support children's rights. The unit begins with an exploration of the Atlanta Community Food Bank as an example of one such organization. After this introduction in an organization and how to research and write about it, the students pick an Atlanta organization of their choice to research. They use their new internet research knowledge to learn about this organization and afterwards, they write an informational report about the organization.

Process

We devote approximately 90 minutes per week to the “formal” social studies curriculum, although there are many ways that we integrate our studies into other curricular disciplines, including math, language arts, art, and music. As we seek to fulfill our mission statement, we provide challenges in the social studies curriculum through hands-on, project based learning, as well as through the teaching of basic researching skills. We integrate the Quaker values of truth, simplicity, community, equality and peace in our studies of children's' rights as we attempt to empower students to develop critical thinking skills so they will be prepared to go out into the world with conscience, conviction and compassion. Students learn to work, both independently and in small groups, to research, prepare and present projects to their peers. Students learn to gather information through reading, listening, observing and studying maps and other symbolic sources of information. Students will also learn to expand upon their studies by developing questions about what they are learning. Creativity is encouraged as students present new learning throughout the year.

Learning Objectives

Habits of Mind

Students will:

- Determine sequences of events and identify cause and effect relationships.
- Arrange events in chronological order using a timeline.
- Analyze and interpret information from a variety of sources.
- Identify and discuss main ideas from reading or listening.
- Use gathered information to create novel projects or presentations
- Grow in their curiosity about the world and people around them