



Fifth Grade Curriculum Guide

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

Quaker beliefs and practice are woven into our Middle School on a daily basis in our emphasis on community and conflict-resolution, in collaborative and reflective teaching methods, in cooperative projects and assignments, in the language we use and the choices we offer, in the construction of our curricula, in our focus on questions and queries, in our incorporation of diverse experiences and perspectives, and in our practice of silence.

For fifth-graders, the SPICES are woven into the curriculum. In environmental sciences, students learn about biomes and the communities they support, emphasizing Community, Simplicity and Stewardship. In social studies, students discuss Equality and Peace as they explore the ways in which people have formed governments to manage community affairs as well as how individuals have acted with integrity to endorse political and social change. In language arts, students read and discuss the themes of Change and Integrity, which resonate with their experiences of adapting to the changes of a new environment while sustaining their goodness and the truths of their core selves.

Students will learn about

- The six Quaker testimonies (SPICES): Simplicity, Peace, Integrity, Community, Equality, Stewardship
 - The purpose of Silent Meeting
 - The “inner light” or “that of God” in each of us
 - The historical beginnings of Quakerism
 - Basic religious beliefs of Quakers
 - The actions of Quakers on behalf of social justice
 - The value of community service
 - The value of stewardship and conservation
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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

- Identify cultural values that are at odds with simplicity and understand personal choices in relationship to that tension
- Recognize commercialism and the ways in which commercial culture encourages materialism and generates “false” needs
- Recognize that we carry and can be satisfied and nurtured by the “fruits of the spirit”
- Recognize that simple ways of living better preserve and conserve our natural resources
- 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
- Identify and articulate personal needs in particular situations
- Identify and express a range of emotions
- Use “I” statements in negotiating conflict
- Tell one’s own story/perspective with integrity
- Listen without interruption to someone else’s story/perspective
- Take responsibility for one’s words and actions
- Make and accept apologies
- Identify differences of opinion and/or perspective
- Problem-solve how to arrive at “win/win” solutions
- Identify steps that escalated a conflict and steps to de-escalate a conflict
- Seek help at the appropriate time
- Walk away to disengage

PEACE *(continued)*

- Identify responses to personal, social, and historical conflicts that involve aggressive and/or violent uses of power along with the destructive effects of such power
- Identify forces or factors that erode the peace of communities, societies, and cultures
- Know about and use alternative, non-violent options in response to conflict

INTEGRITY

- Recognize the connection and/or gap between personal values and actions
- Speak one's own truth regardless of popular opinion/peer pressure
- Take responsibility for one's words and actions
- Recognize that words are actions with effects and not "just words"
- Embrace the courage to tell the truth regardless of consequences
- Embrace the courage to express one's truth and to support others in doing the same
- Understand academic integrity and the definition of plagiarism

COMMUNITY

- Make contracts and agreements for peaceable cooperation within a community
- Articulate affirmations for self and others
- Problem-solve with the needs of the group in mind along with the needs of the self
- Act on behalf of the community willingly and cooperatively as "second-nature"
- Recognize that the actions of "elders" influence younger students and choose to be a positive influence
- Identify when simmering or underground tensions or conflicts are harming the community and bring them out into the open to be addressed
- Recognize actions that can harm community and make personal choices to strengthen community
- Speak up when others are considering actions or are acting in ways that are harmful to others and/or the community
- Act to assist and/or care for people in need
- Identify the importance of ritual in life passages and share celebrations
- Participate actively in serving the community

EQUALITY

- Identify actions, language, and practices that create inequities
- Speak on behalf of those who lack power or privilege in specific situations
- Know how to respond when people are put-down or called names
- Recognize stereotypes
- Act inclusively to allow everyone access to resources, activities, relationships
- Analyze social institutions to identify ways in which equality is supported or eroded
- Examine history to understand how people have worked to create equality within communities, societies, and cultures

STEWARDSHIP

- Make use of daily habits that maintain the school facility and materials
- Understand different types of resources and how they are used at school; act to conserve resources
- Recognize the connection between values and expenditure of resources
- Identify equitable distribution and inequitable distribution of resources in communities ranging from the classroom to the world
- Plan with a consideration of resource management
- Perform actions voluntarily and cooperatively to serve the community and/or preserve the environment
- Identify cultural practices and legal actions that preserve and erode the environment

COMMUNITY SERVICE

For centuries, Quaker testimonies of simplicity, peace, integrity, community, equality, and stewardship have led individuals and groups toward transformative civic engagement. The desire to seek a world in closer alignment with the values of the testimonies calls Quakers to a higher level of awareness about social justice and injustice.

It is in this tradition of service to build a greater good that FSA asks of its students to perform community service hours in the Middle School. In addition to the possibility of improved social outcomes for our community, we believe that volunteering yields significant educational and social enhancements to students.

Students blossom as they discover a new area of interest, make a connection between subject matter and the “real world,” take pride in a job well-done, or succeed in leading a community wide effort. Additionally, we know that as students transition to high schools, a record of community service signifies a quality of character that is valued. Finally, serving others is personally fulfilling, satisfying what we believe is a deeply held need: to, in some small way, make a positive difference in the world. Serving others is a booster to self-esteem and quite simply, feels great.

Requirements

In an effort to support our students in their cognitive and social development, our requirements for fulfilling community service grow incrementally over the four years of Middle School. We have made a distinction between two levels of service: one which involves students in manageable community service activities and supports success, another which exhibits a significant commitment to a life of service. **Fifth graders are asked to contribute five hours of community service and ten hours to show significant commitment.**

Upon completing a community service opportunity, students must complete a community service slip (located in their homerooms) indicating the number of hours served. Students should obtain a signature of a person at the agency where the student performed the service or from a parent who can verify the participation. Students can turn in the completed slip to the designated teacher.

Community service hours are tallied at the end of each quarter and recorded on students' reports.

Opportunities for community service at FSA:

There are a variety of ways students can obtain community service hours at FSA.

- Grandparents and Special Friends Day
- Open House Days
- Field Day
- Other Special Events
- Administrative Support

From time to time, other opportunities arise. teachers make an effort to alert students of these opportunities.

Guidelines for Community Service:

We wish to encourage students to volunteer outside of FSA at nonprofit organizations that benefit the greater community in some way. While enterprises such as babysitting or working in a general office provide useful and meaningful experiences for students, they do not constitute community service activities. However, if the babysitting happened at a women's shelter or the office work happened at a nonprofit organization, then the activity would match the spirit we are intending for community service at FSA.

We feel that community service opportunities are a great way to deepen existing students' interests or develop new ones. One way to seek meaningful community service opportunities outside of school is for families to have a discussion with their students about what ways they might like to help in the community. Conversations about social issues in their neighborhood are a great catalyst for learning more about what appeals to a student.

The Transition into Middle School: An Incremental and Interdisciplinary Approach

The transition from fourth to fifth grade—from elementary to Middle School—can be both exciting and scary for students. They move from a home-base classroom with one or two lead teachers into a world of more complicated modular schedules and many teachers. The social part of school is beginning to take on a life of its own. Sleep schedules begin to vary and stutter. And just as these big changes occur, and school yields more freedoms and choices, students are also taking the developmentally-appropriate steps into greater independence. They are faced with learning how to become Middle School students while maintaining a grip on those aspects of themselves that have always defined them. How do they change without losing themselves? How do they fit in without giving up the differences that make them who they are? How do they know which changes are positive and what the long-term impact of those changes will be? How do they make changes in their communities? How will their communities change them?

For fifth-graders, we have developed a structure to ease the transition into Middle School, thereby containing excitement, managing anxiety, and hopefully sustaining a positive sense of adventure while instilling feelings of empowerment and resilience. While fifth-graders change classes and have lockers and a schedule to follow, they also spend more time in their homeroom groups, have fewer teachers and classes, and receive a curriculum that is more heavily interdisciplinary and thematically-based. Our fifth-grade program is designed to introduce complexity in incremental and manageable steps and to allow additional time for direct instruction in organizational and study skills. The fifth-grade language arts themes have been selected to correspond to some significant developmental tasks and experiences faced by students of this age. In their academic times as well as their home-base times students are reflecting upon the transition into a new phase of their lives and how to become a Middle School student while retaining their core selves. This thematic approach allows students to address recurring topics throughout their classes and activities, reflecting upon transition and adaptation, as well as community and diversity, change and integrity.

EMPOWERING CONFIDENCE AND SUCCESS: INTERNALIZING STRATEGIES AND EXERCISING HABITS

In Middle School, students learn how to learn and to negotiate the demands of an increasingly complex and demanding school day. They transition from a home-base classroom to a modular schedule with several classes and teachers. Their books and papers multiply. Their backpacks get bigger and heavier. Their assignments become more varied in tasks and timelines. All of this occurs as students are transitioning into greater independence and increased freedoms and choice. To manage these changes successfully, students need to internalize the strategies and habits of successful students, who are punctual, prepared, participatory, proactive, productive, and purposeful. In fact, these strategies and habits form the foundation of life-long learning and contribute to attitudes of confidence and well-being.

Fifth grade students learn student and study skills in Bridges, which is a class that focuses on the transition into Middle School and the increasing requirements for organization and executive functioning skills. Fifth graders also take a required keyboarding class to develop typing and text formatting skills. The goal for student skills support is for students to practice and internalize the skills, habits, and processes of independent, life-long learners.

Students will achieve independence at different rates, so opportunities exist for students to maintain support as long as they require it. At the same time, students who have internalized these skills and habits are allowed more independence. Communications between home and school provide a strong foundation for supporting students in organizational growth. Homeroom teachers, who are also student advisors, oversee plans for incremental support and manage home-school communications.

Students in the fifth grade have opportunities to learn effective homework and study habits. The goal of homework in Middle School is to develop productive work habits, practice target skills, reinforce learning and gain experience in extended projects. Middle School students typically need a great deal of structure to develop successful homework completion habits and routines. We provide this structure through an incremental increase in homework expectations across the Middle School grades and the consistent applications of communication and assessment routines.

Students in fifth grade are expected to do up to an hour and ten minutes of homework a night without outside reading. Homework includes an organization component. A key to success in Middle School is organization! To be organized, students must spend time every day reviewing assignments and dispatching papers to the appropriate locations. We have included time for organization because we know that students who are successful attend to their systems on a regular basis.

All students in Middle School are required to engage in sustained outside reading on a nightly basis to increase fluency and skills. This reading requirement is one way that teachers are able to tailor homework to the individual. For students who read slowly or who work slowly, the reading times may include reading for subject-area classes such as social studies and science. For example, time spent reading a chapter of science and taking notes may count for the reading requirement minutes for that night's homework. For students who read and work more swiftly, and who are ready for additional challenge, the expectation for outside reading could be designated as non-subject-area-assignment reading. In this way, teachers are able to adjust based upon a student's learning profile and goals for high school. Teachers also provide an increased challenge amount of reading for students ready and able to do more, and this challenge is noted on a student's academic report.

Across the four years of Middle School, students will practice and internalize strategies for and habits of being

PUNCTUAL

- Be on time for school and class
- Let people know if you cannot be where you are supposed to be

PREPARED

- Keep an accurate and up-to-date agenda (planner) and use it successfully
- Come to class and arrive home with the necessary materials, including homework and printed assignments
- Set materials up for class before the teacher begins
- Complete homework each night with care and effort

PREPARED *(continued)*

- Come to discussions having read or studied required material and ready to support ideas with specific examples and evidence
- Know how technology can assist with writing, note-taking, and project production
- Create accurate plans to manage time in order to complete assignments
- Develop incremental project plans for longer-term assignments

PARTICIPATORY

- Follow class processes
- Adhere to complete work processes for various disciplines
- Volunteer answers/comments in class using elaboration and detail
- Demonstrate active listening and attending by being able to reflect and paraphrase multiple perspectives
- Engage effectively in a range of collaborative discussions and small group work with diverse partners
- Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed
- Use strategies for productively negotiating differences of opinion, attitude, and ability

PROACTIVE

- Understand one's own learning style or profile and know supportive learning strategies
- Identify areas of challenge and difficulty
- Understand different resources that can be used for solving different problems
- Actively seek assistance when problems arise
- Advocate for self academically and socially
- Demonstrate leadership in the classroom by helping others and modeling productive and respectful behaviors

PRODUCTIVE

- Manage focus and energy appropriately in class
- Take the necessary time to read and interpret directions
- Begin work right away, recognizing and responding to procrastination with useful strategies
- Self-identify off-task behavior and redirect
- Sustain periods of focused work
- Take notes successfully given learning profile
- Study for tests successfully given learning profile
- Commit time to checking work, reviewing, and proofreading

PURPOSEFUL

- Aim for personal best
- Seek discovery and take advantage of learning opportunities
- Maintain a positive attitude
- Demonstrate resilience by learning from mistakes and making productive use of feedback
- Engage in effective self-assessment (set reasonable goals, develop plans for reaching goals, and implement plans with purpose)
- Demonstrate academic integrity by doing one's own work, differentiating between one's own and others' words, and adhering to conventions of citation and reference

Student Skills Emphasized in Fifth and Sixth Grades

The list below identifies skills and processes focused on in fifth and sixth grades. Because students have different learning profiles and develop understanding at varied rates, the list includes both years and students are seen as having both years to practice and build proficiency skills. Some skills are focused on more in fifth grade and others are in sixth grade.

Fifth graders focus on learning student skills and habits during a Bridges class which meets three days a week. Often this class provides instruction to correspond with units of study or assignments in other classes. All fifth grade classes provide direct instruction in the skills and habits of being a successful student, and teachers share a set of common practices designed to reinforce strong organizational routines.

KEEPING A WEEKLY PLANNER

- Have a consistent location for weekly planner
- Get planner out at the appropriate times
- Write assignments down accurately and legibly
- Double-check planner and know how to get missing information (website, study buddy, teacher)
- Ask for help when an assignment is confusing

KEEPING A NOTEBOOK

- Be familiar with systems and supplies
- Clip or file papers where they are supposed to go right away
- Keep notebook sections in order
- Clean out notebooks on a regular basis (making decisions about what should be kept in notebook, filed, and discarded)

HAVING THE RIGHT MATERIALS AT THE RIGHT TIME

- Keep a copy of schedule handy for packing up during the school day (locker door is a great spot)
- Keep locker tidy and organized
- Select necessary materials for next block of classes (between locker breaks)
- Use planner at end of day to select materials needed to complete homework
- Use planner at home to select materials needed to pack up for the next day
- Pack up at home ahead of time after completing homework

COMPLETING HOMEWORK ON TIME

- Keep and use a planner
- Have a routine time, place, and process for doing homework tasks that includes breaks
- Refer to planner at home to make a homework plan that estimates how much time tasks will take and organizes the task into workable, manageable order with breaks
- Follow homework plan and check off each homework assignment when it is finished
- Double-check planner and check-marks to be sure all assignments have been finished
- Print papers and assignments the night before to have them ready for class, or, if printing must happen at school, develop plan for printing BEFORE class
- Use trouble-shooting strategies: phone a friend, check website, ask a parent for help, get a parent note, etc.
- Have a fool-proof pack-up routine that involves returning materials to backpack and filing homework in a consistent, easy-to-access spot

HAVING A PRODUCTIVE CLASS ROUTINE

- Locate a seat that works for focused concentration
- Get the appropriate materials out before class begins (including planners, homework, and sharpened pencils)
- Write down homework without reminders
- Ask questions when confused
- Use space breaks as needed to stay on track
- Follow processes defined for class
- Put materials away in the appropriate places in the classroom and in notebooks or other personal materials (not stuffed randomly in backpacks, books, or notebooks)
- Select “just-right” books
- Sustain reading for an extended period of time on a regular basis
- Sustain listening focus to a book being read aloud
- Maintain chart or record of reading
- Recognize key words in directions and the actions those words represent
- Make predictions about what may happen based upon textual clues
- Identify cause and effect in plot
- Create “mind-pictures” while reading
- Recognize the many features of a text and use them to comprehend, including pictures and graphics, headings and subheadings, front and back covers, tables of contents, copyright pages, glossaries, and indices
- Scan and reread to locate information to answer questions
- Identify the difference between reading for entertainment, reading to evaluate, and reading for information.
- Identify main ideas and supporting details
- Summarize main ideas in logical sequence using one’s own words
- Evaluate book on a scale of 1-5 and provide personal reasons for that evaluation
- Demonstrate an understanding of the difference between the words of another text and one’s own words
- Use strategies for defining unfamiliar words including use of context clues, dictionaries, and prefix, suffix, root analysis
- Use strategies for marking and noting information while reading (graphic organizers, notecards, sticky notes, computer tools)
- Identify purpose for reading and use strategies appropriate to purpose
- Practice active reading by previewing and reviewing texts when appropriate

DEVELOPING BASIC NOTE-TAKING AND STUDY SKILLS

- Understand the importance of reading, re-reading, and checking directions
- Use notecards to record information and to study
- Decide what information is important to write down, to study, and what materials should be available at the right times
- Use graphic organizers to take notes
- Make studying active by using strategies that appeal to different modalities
- Become familiar with different computer note-taking tools and practice using them
- Select note-taking strategies with an awareness of personal learning profile
- Use resources to ensure notes are accurate and comprehensive (classmates, teachers, books)

DEVELOPING BASIC TEST-TAKING SKILLS

- Understand the importance of reading, re-reading, and checking directions
- Know strategies for taking matching tests
- Know strategies for taking multiple choice tests
- Notice keywords that tell you what to do or give you important information
- Take a “bubble” test
- Write a clear and comprehensive short answer in a complete sentence or a few complete sentences
- Know the importance of and practice checking over work

PARTICIPATING IN GROUP ASSIGNMENTS OR PROJECTS

- Read group assignment directions
- Define the problem or assignment and brainstorm approaches
- Identify and assign tasks
- Focus and follow-through on discussions and tasks
- Listen to questions and ideas of others
- Offer ideas and ask questions
- Recognize balance between contributing and listening
- Know roles that can be assigned in group work (clerk/leader, recorder, time-keeper, etc.) and respect the roles as assigned
- Seek assistance as needed from teacher

CONDUCTING RESEARCH

- Know about different resources: dictionaries, encyclopedias, almanacs, atlases
- Identify the question or topic
- Use table of contents, glossary, index, headings and subheadings to find information
- Generate key words and phrases for information searches
- Identify information pertinent to question or topic
- Use methods to note information (both hand-written and computer methods)
- Identify source for noted information
- Put information in “your own words”
- Use citations for pictures and information

SETTING AND MEETING GOALS

- Assess performance realistically
- Consider input from others and determine how to respond
- Identify areas for growth as well as achievements
- Specify a manageable benchmark on path to goal
- Ask for assistance
- Recognize and celebrate when a benchmark has been reached
- Keep trying when success proves difficult and maintain positive attitude

Academic Subjects

Language Arts

Text Selection

Textbooks

Reader's Handbook, Grades 4-5, Grades 6-8 (to support differentiated instruction) Daily Grammar Practice Grade 5

Additional Materials Include

Evan-Moor: *A Word a Day Poetry Comprehension, Poetry Patterns to Read and Understand, Writing Poetry*

Harcourt Family Learning: *Writing Skills, Language Arts*

Houghton Mifflin *English*, Grade 5

Jossey-Bass: *The Blue Book of Grammar, Grammar Grabbers*

The Learning Works: *Prefixes and Suffixes*

Lipson: *Poetry Writing Handbook*

Mark Twain Media: *Figurative Language*

The Princeton Review: *Word Smart Junior*

Scholastic: *Mastering the 5 Paragraph Essay, Super Sentences and Perfect Paragraphs, Styles of Writing, Writing Lessons That Work, 100 Vocabulary Words Kids Need to Know, Ten Fabulous Forms of Poetry, Teaching Grammar with Playful Poetry, Comprehension Cliffhanger Series, Awesome Hands On Activities for Teaching Grammar*

Spark Publishing: *Daily Spark for Writing, Spelling & Grammar, Reading Comprehension, Critical Thinking and Poetry*

Spectrum: *Language Arts, Prefixes and Suffixes*

Sylvan: *Vocabulary Success*

Walch Publishing: *Find the Errors!*

Other Texts

First and foremost, texts for Language Arts classes are selected based upon a teacher's vision for their class and specific instructional goals. In addition, however, text selection in Middle School is subject to a variety of considerations arising in part from the "in-between" nature of Middle School readers. Students are at a variety of reading levels and maturity levels. Especially as students move into the seventh and eighth grades, the books aimed at nine to twelve-year-old readers become too easy to provide a challenge for some students. Young adult fiction, however, often presents serious and more mature subjects that not all students or their parents are ready to have introduced. The reverse is also true. Some older readers may have the skills for nine-to-twelve year-old books but feel pinched by the younger point of view. Many parents ask about the classics, and certainly students need to begin experiencing the classics, but issues of reading and maturity levels arise as many classics were written for an adult readership. Adults often wish to prolong students' introduction to serious topics, and some students recognize inside a quiet desire to remain a child for just a bit longer. Other Middle School students want nothing more than to consider life's hardest questions and saddest problems, and they wish to discuss these in detail and depth as they come to terms with growing up in a complex world. Selecting appropriate books for groups of Middle School readers presents a number of challenges.

At FSA we attempt to navigate this complex of variables by following some guidelines in a thoughtful and reflective way. First of all, we remember our mission as a Quaker school, which calls us to bring considerations of justice and peace into our selection process. We would not choose to teach a text, for example, that extolled the use of violence to solve problems. Of course, many texts represent acts of violence in order to critique them or to raise questions about the culture that values such acts. In choosing such a text, we would do so carefully and with a plan for how to teach the issues raised by the text. This approach would be the case for other issues or choices called into question by our mission or values. We do not shy away from reality, but we do look carefully at the ways in which the text responds to that reality. When thorny issues are addressed, we inform families ahead of time so that any concerns can be communicated and addressed. Teachers consider how to involve students in reflecting upon what they encounter in a productive and positive way. Any specific recommendations for students are made with the individual student and family in mind. Another guideline in our text selection is that we turn to families for support and input.

In choosing texts, we are guided by our commitment to diversity within an inclusive community. We try to ensure that all students experience authors and characters with whom they can identify as well as from whom they can learn about different perspectives and experiences. Our reading should be representative in authorship and depiction of the diversity within our community. A goal is to engage students in multiple viewpoints while remaining aware of the age affinity of Middle School students. We challenge ourselves to be aware of stereotypes in texts, selecting against them or, in the case of historically-based and/or biased texts, discussing the effects of such stereotypes on real readers. We ask students to read within the text, understanding the world that is created from the inside, and then to step outside of the text and assess it within the context of their own values and beliefs.

At FSA we are committed to selecting quality texts that inspire and engage students. We often choose books that have been given awards for excellence. Teachers select texts that enhance the thematic investigations of their classes and/or address issues relevant to the lives of Middle School students. We try to prepare students for the world in a developmentally-appropriate way, although this process is never a clear formula that applies to all students at all times. We believe that the most productive approach is open communication with students and parents.

Key Content Themes

In shaping our language arts program, we have embraced research showing that students gain literacy skills more effectively in a rich textual environment in which the real-world uses of reading and writing are demonstrated and emphasized. At the same time, we have listened to students through the years speak of their experience, which overflows with words: magazine advertisements, television, lyrics, the internet, newspapers, textbooks, billboards, and on and on. Wherever they look or whenever they listen, words tumble at them, whispering or screaming some sort of message. Often their response to this barrage is to conclude, “They’re just words,” words with no authentic connection to truth or reality, words that don’t really matter. One of our goals is to convince students that not only does effective language-use enhance academic and real-world success, but language does, in fact, shape truth, reality, and identity.

Another of our goals is to provide students with the knowledge and skills needed to use language wisely and well. Then students will increase their academic and vocational effectiveness. They will better their abilities to negotiate the adult affairs, issues, and institutions that are coming their way. They will strengthen their ability to shape truth, reality, and identity. Rather than being unreflective consumers of language, or naïve rebels who oppose the enterprise even as it impacts who they are and what they can do, we want students to be active and astute writers, readers, and speakers, aware of how language impacts them, aware of their own language choices. The testimony of integrity calls us to use words intentionally and authentically. We want students to have the courage as well as the skills to answer that call.

Finally, we want students to appreciate and enjoy language, to recall the early magic of discovering the world again by learning the words to name its parts. Before babies ever speak, they recognize the voices of those most important to them, delighting in the tones and sounds of the words, soaking up stories and songs and just plain silliness. Then the mystery of speech unfolds. The circle of familiarity enlarges as words are put to things and actions and then relationships. Such serious, important work remains playful. Children know well how to do some serious play. Our goal is for Middle School students to retain that ability, or, if necessary, to rediscover it no matter how long ago it might have been lost. We want words to provide them with the comfort of a familiar voice, the delight of tones and sounds, the breathless “what’s next” of a great story, and the satisfaction of an apt ending. We want words to provide answers and counsel in times of trouble and to shape the questions that lead to revelation.

Reading

Reading ability is critical for academic success in all areas. Research has shown that sustained, independent reading outside of school positively correlates with reading fluency, comprehension, vocabulary enrichment, verbal intelligence, general knowledge about the world (schema), standardized test scores, general academic achievement, and even with regular adult exercise. Unfortunately, research also indicates that during Middle School students tend to spend less time reading. A central goal for our program is to involve students regularly in sustained, independent reading in order that they derive the benefits listed above. Additionally, we'd like to see students develop a sense of pleasure in reading that will support the habit for a life-time. To do so, we must remain aware of the purposes for which students read and the kinds of materials they like to read while also introducing them to new purposes and genres that strengthen their reading muscles. Structured choice is central to our approach to reading. We offer students a combination of free choice, guided choice, and required reading assignments in order to best perform this dance of partnered attention to students' purposes and the demands of academic proficiency and flexibility.

Outside Reading

For the four years of Middle School, students engage in sustained, independent outside reading. In recognition that this rigid structure defies the rather fluid nature of reading habits for many, teachers begin to individualize the reading requirement and structure to suit the student. Some students absolutely need a rigid structure to support the habit of reading. Others may gain more satisfaction and success if the schedule is altered to fit their family's weekly round of activities. Still others need to be completely in charge of when and where they read. Teachers, students, and parents work out these plans together. Another adjustment that can be made to better address the needs of individuals involves the amount of reading time. While forty minutes of reading for some students is a nightly achievement, for others it is just one lap of many in a day spent with a book. These students can increase the amount of nightly reading and the difficulty of the reading in order to achieve the strengthening effect targeted by this requirement.

Central to the success of the outside reading requirement is that students have a degree of choice in the material they read. While students are often asked to read specific materials for classes, they retain some choice over their reading, which can be adventure, mystery, science fiction, fantasy, biography, science, history, poetry, drama, and more. Some of the

time, teachers will ask students to select a book from a reading list, making a choice that departs from the usual fare, in order to encourage students to try new genres or authors. On occasion, teachers will ask students to read the same text as a group or a class. At these times, reading assignments can count as outside reading—or not, if the student wishes to continue the other book at the same time. Teachers are available to help students select books, but perhaps the most effective counselors are other students. The more students talk to each other about the books they read, offering evaluations and suggestions, the more that reading becomes an integrated part of their lives and of the school culture. Teachers often support this development by providing students with opportunities to talk about their books. The more this forum is addressed to students rather than teachers, the more successful it will be. Therefore, in addition to than writing the traditional book report, teachers might ask students to write postings for a class website designed to provide suggestions for outside reading, or students might be given a variety of fun options for displaying their information about their books such as cover designs or dramatic enactments or pyramid sculptures.

Reading Aloud

Middle School students have not outgrown the read-aloud experience. They continue to take pleasure in hearing a story read aloud. Additionally, the activity of reading becomes communal rather than individual, which appeals to the social nature of Middle School students. There continues to be an advantage in having students hear new words and their correct pronunciations. Additionally, in this communal environment, teachers and students can pause to discuss aspects of the text, which results in increased comprehension as well as new schemas for comprehension. There are many ways that readers engage with the texts they read. Academic strategies are but one set of approaches, a critical set for success in school. Through discussion of a shared text, students learn and reinforce through practice academic reading strategies that are modeled by the teacher. Students learn what details are given greater value, how to locate patterns in those details, how to identify the pattern called a “main idea” or “theme,” how to ask the kinds of questions that skilled academic readers ask, and so forth. Teachers at FSA recognize that academic success requires a comfortable proficiency in these strategies, but they also recognize that these strategies, while critical for success, are not inherently superior to other ways of reading that students may carry with them that have been developed and reinforced in other environments. The experiences and strategies that students bring into the classroom are recognized as having value while, simultaneously, students are taught the academic strategies that will bring them success. Students learn to select successful strategies for the purpose before them.

Academic Reading Instruction

Academically-successful readers have a bountiful collection of strategies available to them as well as the ability to match the appropriate strategy to the situation. As students move through the four years of Middle School, their collection of strategies increases. In the fifth and sixth grades, students continue to refine and practice literal comprehension skills to increase the accurate decoding of textual information. Students also practice the inferences expected of skilled readers and build their knowledge of patterns, conventions and connections that characterize different genres of text. They practice identifying main ideas, sequencing ideas or events, and summarizing. In the seventh and eighth grades students continue to develop literal comprehension skills.

Classroom instruction sustains more focus, however, on interpretive reading as students become more practiced at inferential reasoning. They discuss how different genres work and learn the language used to describe textual form. They practice identifying themes, narrative point of view, and symbolism. Because students develop the ability to maneuver through these abstract discussions at different rates as they gain the cognitive ability, there continues to be a braiding of literal, interpretive, and constructive considerations throughout the seventh and eighth grades.

Students learn that a text can be read from multiple perspectives, for different purposes, resulting in a variety of experiences or readings. As teachers who are passionate about our subject, we are very aware of this multitude of possibilities. As we move students into literary experiences, we select texts that will provide a particular learning experience which is based upon and contributes to a conversation we are building in our classes. The focus and content of this conversation in fifth grade connects to students' personal and curricular experiences in other classes: Change and Integrity.

Included in academic reading instruction are research methods and skills. Students throughout Middle School are involved in research activities because our courses are investigative. We emphasize asking good questions and knowing how to go about answering them. Students learn about different resources, where to find them, how to access them, and how to use them. They learn about search strategies. They practice the detective mindset that characterizes the best researchers. They develop the ability to reframe a question, to pursue an alternative search strategy, to look in the obvious and less-obvious places, thereby strengthening the resilience, persistence and flexibility characterizing successful creators and inventors. They learn strategies for tracking information and resource-use along with the appropriate applications of bibliographic form. They encounter and revisit the ethics of citation and the definition of plagiarism.

Writing

In the Middle School, we teach writing as a process. We ask students to learn about and to move through the stages of writing that researchers have identified expert writers as using: pre-writing, drafting, revising, editing and proofreading. Our emphasis is on learning strategies that help writers articulate their thoughts, beginning when they first read an assignment and ending when they correct the last grammatical error. This approach breaks writing into a series of defined, smaller tasks that make a difficult process more manageable.

A foundational goal for any writer is fluency: students need to get comfortable producing text. For a while, students need to write often to become better at generating ideas. These ideas may not be cohesive or fully developed, but over time students will build proficiency with these aspects of writing, too. We ask students to focus on and practice particular aspects of writing, gaining control over those, and then moving on to others. By the eighth grade, students are learning to organize a literary essay that develops an argument using textual proof. They are ready to tackle this important and sophisticated writing task because they have already learned in previous years to generate ideas, to write a coherent paragraph with a topic and concluding sentence, and to compose a concise yet comprehensive summary. The ability to summarize a text is developed in the fifth and sixth grades. Summary seems simple, yet to summarize students must decode accurately, recall details, assign importance and value, generate sequence, and draw conclusions, all of which must be cast into language and form. A one-sentence summary is different from a paragraph summary, which is different again from a two-page summary. A novel summary is different from a textbook summary. Students build their skills at writing summaries as they practice the writing process and become better at adapting that process to the writing task at hand and to their individual learning and composing styles. In addition to standard academic writing tasks such as the summary, review, report, and argument, students use the writing process to compose a variety of other forms such as poems, stories, autobiographies, letters, editorials, newspaper articles, and scripts.

Revision relies upon reading. To revise, a writer needs to step back from his or her text and read it to see what works and what doesn't. This kind of reading departs from what students typically do for they must analyze how text works as well as what it says. Once the troublesome areas are pinpointed, the writer problem-solves how to rework problem areas in order to make each and every part of a text successful in contributing to the whole. In the Middle School, we

spend time teaching students how to do this specialized kind of reading not only for their own papers but also for their peers' papers. Students learn how to identify and communicate strengths. They practice expressing problems specifically and neutrally so that their feedback can be heard. They practice hearing feedback with a positive attitude. In writing conferences, students share ideas about how to solve problems and improve their work. Over time, students develop their skills as critical readers of writing. They also begin to internalize the voices of their peers and their teachers, increasing the options available to them when they write and revise independently.

Students learn how to read their writing in order to correct grammar, syntax, punctuation, and spelling. This stage of the writing process requires that students build a storehouse of knowledge. They need to know spelling rules and exceptions. They need to know how to use a dictionary. They need to know rules for capitalization, punctuation, and usage. They need to know how to use a grammar handbook. They need to be able to hear or sense when a word or phrase or idiom is misused. They need to read carefully and closely enough to see what a word is missing or a letter is left off. They need to know how to recognize complete and incomplete sentences as well as several sentences that have been erroneously spliced together. This very particular kind of reading typically requires knowledge of the parts of speech so that the sentences can be analyzed and their grammatical completeness determined.

Over the four years of Middle School, this storehouse of knowledge gets built and used as students learn grammar and usage and rules that are then put to work in their own writing. Students also practice proofreading and are asked to proofread every assignment they turn in, providing as part of the heading the number of minutes spent locating errors in the paper. Our goal is to signal the importance of this final stage of writing so that students, through practice, make habitual this specialized act of reading.

Supplementary Areas of Study

Best practices in Language Arts instruction specify that learning about language happens contextually. Students need to experience chunks of text written for actual readers for authentic purposes. Proficiency of vocabulary or textual convention is best achieved when connected to actual texts and language-use.

Still, students in Middle School often need to focus on vocabulary development and grammar in order to grasp the analytic techniques used to describe and manipulate language; students also often need to build knowledge of these fairly rapidly in order to prepare for the academic demands of high school and standardized testing. Therefore, throughout Middle School attention is given to vocabulary development and grammar, which includes learning the rules for Standard English. Students engage in mini-lessons and practice exercises to cement proficiency. Whenever possible, however, teachers tie these lessons and practice exercises to whole-piece reading and writing. Students may be asked, for example, to do an exercise in which they match a new vocabulary word to its definition. But then they may also be asked to write a story using the new vocabulary words, thereby placing the words in context. When these stories are read to the class, the text becomes even more “real-world,” for it gains an audience in addition to the teacher. For grammar study, students may be asked to identify active and passive verbs in stand-alone sentences. But then they may also be asked to identify those verbs in their own writing, noting differences in how well the sentences convey meaning and why. As teachers continually link practice exercises to actual texts, students begin to understand the motivation for knowing words and using them well, for knowing conventions and applying them effectively. As students return to their own texts, and receive feedback from other readers, we hope they discover the relevance of knowledge that can too easily seem like arcane and mysterious riddles.

The language arts skills listed below are adopted from the [Common Core Standards](#)

SKILLS

Reading

Reading Foundational Skills

Students will:

- Phonics and Word Recognition
 - Know and apply 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 multisyllabic words in context and out of context.
- Fluency
 - Read with sufficient accuracy and fluency to support comprehension.
 - Read grade-level text with purpose and understanding.
 - Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression.
 - Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Reading Informational Text

Students will:

- Key Ideas and Details
 - Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
 - Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
 - Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
- Craft and Structure
 - Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.
 - Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.
 - Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.

- Integration of Knowledge and Ideas
 - Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
- Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
- Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
- Range of Reading and Level of Text Complexity
 - By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.

Reading Literature

Students will:

- Key Ideas and Details
 - Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
 - Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
 - Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).
- Craft and Structure
 - Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.
 - Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.
 - Describe how a narrator’s or speaker’s point of view influences how events are described.
- Integration of Knowledge and Ideas
 - Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).
 - Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.
- Range of Reading and Complexity of Text
 - By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.

Writing

Text Types and Purposes

Students will:

- Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
 - Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.
- Provide logically ordered reasons that are supported by facts and details.
- Link opinion and reasons using words, phrases, and clauses (e.g., *consequently, specifically*).
- Provide a concluding statement or section related to the opinion presented.
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
 - Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aid comprehension.
 - Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
 - Link ideas within and across categories of information using words, phrases, and clauses (e.g., *in contrast, especially*).
 - Use precise language and domain-specific vocabulary to inform about or explain the topic.
 - Provide a concluding statement or section related to the information or explanation presented.
- Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
 - Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.
 - Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations.
 - Use a variety of transitional words, phrases, and clauses to manage the sequence of events.
 - Use concrete words and phrases and sensory details to convey experiences and events precisely.
 - Provide a conclusion that follows from the narrated experiences or events.

Production and Distribution of Writing

Students will:

- Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
- With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- With some guidance and support from adults, 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 two pages in a single sitting.

Research to Build and Present Knowledge

Students will:

- Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
- Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.
- Apply grade 5 Reading standards to literature (e.g., “Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]”).

Range of Writing

Students will:

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

Language

Conventions of Standard English

Students will:

- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.
- Form and use the perfect (e.g., *I had walked*; *I have walked*; *I will have walked*) verb tenses.
- Use verb tense to convey various times, sequences, states, and conditions.
- Recognize and correct inappropriate shifts in verb tense.
- Use correlative conjunctions (e.g., *either/or*, *neither/nor*).

Knowledge of Language

Students will:

- Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.
- Compare and contrast the varieties of English (e.g., *dialects*, *registers*) used in stories, dramas, or poems.

Vocabulary Acquisition and Use

Students will:

- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies.
 - Use context (e.g., cause/effect relationships and comparisons 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., *photograph*, *photosynthesis*).
 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
- Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
 - Interpret figurative language, including similes and metaphors, in context.
 - Recognize and explain the meaning of common idioms, adages, and proverbs.
 - Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.

- Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., *however, although, nevertheless, similarly, moreover, in addition*).

Speaking and Listening Comprehension and Collaboration

Students will:

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 5 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 by making comments that contribute to the discussion and elaborate on the remarks of others.
- Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
- Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.

Presentation of Knowledge and Ideas

Students will:

- Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
- Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.

Mathematics

Everyday Mathematics is distinguished by several features, many of which enhance teachers' abilities to reach students with a variety of learning styles and needs. First, the program teaches numbers, skills and concepts in context rather than isolation, connecting mathematical problem-solving to students' daily lives, classroom routines, and cross-curricular studies. Everyday mathematics also balances methods of instruction, including whole-group as well as small group, partner, and individual activities. Teacher-focused instruction occurs along with hands-on explorations, on-going practice, and long-term projects. Students are exposed to several methods for basic skills practice and review, including written and choral fact drills, mental math routines, daily sets of review problems, flash card practice, timed tests, and a selection of math games. The curriculum also teaches students how to use technology to enhance mathematical understanding while also including computation practice that does not allow calculator use. **Everyday Mathematics** emphasizes the ability to communicate about mathematical concepts and processes and asks students to explain and discuss their thinking in their own words. Frequently students are asked to communicate with parents about math, involving them in math games or data collection.

Several important principles guided the development of this curriculum. First, students develop mathematical understanding within the context of everyday use and application. Second, children entering school have mathematical knowledge and intuition that should be used as a foundation for math instruction while they develop symbolic and abstract understanding. Third, teachers are the key element in a program's success, so the curriculum should be developed with an understanding of teachers' daily schedules and demands. All math teachers at FSA attend a week of **Everyday Mathematics** training and then have the option of more development opportunities.

Text Selection

Everyday Mathematics, Grade 5, from The University of Chicago

Key Content Themes

The **Everyday Mathematics** curriculum includes eight interwoven strands. Students are exposed to topics multiple times and given frequent opportunities to review and practice skills. This spiraling curriculum acknowledges that the light bulb goes on for students at times and rates. Because students are introduced to a concept and then revisit it numerous times, they have more opportunities to connect, extend and to deepen their understanding. The strands of **Everyday Mathematics** include:

- Algebra and Uses of Variables
- Data and Chance
- Geometry and Spatial Sense
- Measures and Measurement
- Numeration and order
- Patterns, Functions, and Sequences
- Operations
- Reference Frames

Teachers enrich and support students in a variety of ways. They provide additional practice as needed, use manipulatives when necessary, and introduce students to alternative methods for computation. In addition, teachers provide students with challenging opportunities to foster problem-solving and critical thinking. Middle School students have the opportunity to solve logic problems and puzzles.

SKILLS

Numbers and Numeration

Students will:

- Read and write 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.
- Solve problems involving percents and discounts; describe and explain strategies used; identify the unit whole in situations involving fractions.
- Use numerical expressions involving one or more of the basic core arithmetic operations, grouping symbols, and exponents to give equivalent names for whole numbers; convert between base-10, exponential, and repeated-factor notations.
- 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.

- 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

Students will:

- 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.
- Demonstrate automaticity with multiplication facts and proficiency with division facts and fact extensions.
- Use mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the multiplication of whole numbers and decimals and the division of multi-digit 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.
- 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.
- 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.
- 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.

Patterns, Functions and Algebra

Students will:

- 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 with one unknown.
- Evaluate numerical 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 subtractions.
- Describe and apply the properties of arithmetic.

Geometry

Students will:

- 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.
- Describe, compare, and classify plane and solid figures using appropriate geometric terms; identify congruent figures and describe their properties

Measurement and Reference Frames

Students will:

- Estimate length with and without tools; measure length with tools to the nearest $\frac{1}{8}$ inch and millimeter; estimate the measure of angles with and without tools; use tools to draw angles with given measures.
- 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
- Describe relationships among U.S. customary units of length; among metric units of length; and among U.S. customary units of capacity.
- Use ordered pairs of numbers to name, locate, and plot points in all four quadrants of a coordinate grid.

Data and Chance

Students will:

- Collect and organize data or use given data to create bar, line, and circle graphs with reasonable titles, labels, keys, and intervals.
- Use the maximum, minimum, range, median, mode, and mean and graphs to ask and answer questions, draw conclusions and make predictions.
- 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.
- 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 fraction, decimal, or percent.

Science: Environmental Studies

Conservation is a state of harmony between men and land. - Aldo Leopold

Fifth graders are much engaged in the transition from elementary to Middle School. They are moving into a different environment with its own physical and social landscapes. Our hope for them is that they successfully adapt to and harmoniously interact with those landscapes as they discover more about themselves as learners and people.

We have developed a science curriculum that immerses students in scientific investigation as they explore environments and communities. Students will learn about how the environment impacts the development of culture and how culture transforms the environment through science experiments, projects, service learning, and real world investigations. They will also learn how scientists and social scientists observe, investigate and represent these changes.

One community that is readily accessible for study is the fifth grade! Students will consider the ways in which they are influenced by their environment and how they can harmoniously impact the culture and landscape in which they live. Each year students identify a service learning project that will improve their community. Previous projects have included improving school conservation of resources through rainwater collection and more comprehensive recycling practices as well as habitat conservation on school property.

In Environmental Studies, students will consider the wonders of our earth and be challenged to recognize their responsibility for the conservation of those wonders. Students will explore "Ecology," studying the ways in which living and non-living environmental components interact with each other starting with single organisms and expanding to include populations, communities, ecosystems, entire biomes, and then the planet. Students will investigate "People and the Environment," learning how to analyze environmental issues through studying the costs and benefits of human use of the planet's natural resources including forests, fisheries, land, water, air, and energy. In keeping with FSA's Quaker testimonies, students will reflect upon how to be wise stewards of our resources and harmonious participants in our environments and communities. As students consider the economic relationships of producer and consumer, they will also engage issues of equity and equality.

This curriculum introduces students to academic methods, tools, materials, and knowledge. At the same time, it is immediate and personal as they engage in experiments, discussions, debates, and service learning that call upon them to participate, reflect, and take responsible action. They might look at the water cycle, its impact on the earth's surface in different environments, and the cultures that develop in those environments.

They might consider the ways in which a natural resource has become an economic commodity, reflecting upon the question “Who owns the water? The air?” They might collect water samples from FSA’s habitat and perform tests to discover its quality and purity, generating a graph of findings. They might examine the impact of industrialization on the world’s water supply and the ways in which health and safety have been threatened by human “progress.” Students might take on the commitment of nursing a stream back to health or having a reusable water-bottle drive at FSA. Through these many activities, students will be learning how to explore, examine, read, write, and graphically represent their world and to increase their knowledge of its many features and inhabitants. These questions parallel ones being asked in Homeroom and Bridges where students are asked to explore, examine, read, write and graphically represent what they are learning about themselves as creatures who are adapting to the different environment of fifth grade.

Text Selection

Textbooks

Prentice Hall Science *Explorer, Environmental Science*

Additional Materials Have Included

Allende, *City of the Beasts Park,*

A Long Walk to Water Salina,

Flow: For Love of Water

Walker and Walker *A Place for Delta*

Key Content Themes

- Define health and identify factors that contribute to health for humans, other animals, and ecosystems.
- Identify ways that the physical and cultural landscapes impact each other.
- Identify the Earth’s major biomes.
- Define important Earth system cycles: water, oxygen, and carbon, and how these cycles impact and are impacted by the actions of people.
- Understand the interconnectedness of life forms.
- Connect the flux of populations to resource availability, natural disaster, and disease.
- Understand population diversity and species adaptation.
- Begin to analyze how different approaches to resource-use impact people from different places and walks of life.

Learning Objectives

Students will:

- Learn about the kinds of questions that science asks and answers.
- Learn what students study in these different fields and the tools that are used to observe and measure.
- Learn about what counts as evidence in these fields and how evidence is gathered and authenticated.
- Develop knowledge of the scientific method.
- Develop understanding of the work of scientists through inquiry.
- Collaborate in groups to answer scientific questions through investigations.
- Communicate scientific ideas and explanations based on evidence in written and verbal form.

Literacy Objectives

Students will learn to read expository text for various purposes and develop the skills of independent readers including:

- Preparing for reading by activating prior knowledge and developing a purpose.
- Answering questions before, during, and after reading.
- Identifying main and supporting ideas.
- Using context clues and skimming for main ideas.
- Negotiating the often specialized vocabulary of the sciences and incorporating unfamiliar terms into personal vocabulary
- Synthesizing content information through various visual representations of information including Venn diagrams, concept maps, summaries, and outlines.
- Students will develop their note taking abilities through guided practice and the maintenance of a daily science journal.
- Students will develop their written abilities to express queries, observations, and cause and effect relationships using precise and, when required, specialized vocabulary.
- Students will practice writing successful short descriptions, definitions, and explanations.
- Students will practice written forms specific to science and social science such as short lab and research reports.

Social Studies

The social studies program at FSA is designed to balance an introduction to several academic content areas and goals: investigations of geography, history, cultural studies and anthropology, government and civics, religion, economics and resources, as well as current events, all in addition to the development of foundational and discipline-specific skills, and all undertaken through the lens of our mission as a Quaker school. 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 study 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 with 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.

In social studies, students engage in geography studies in order to build a rich store of geographic knowledge that will help them not only to be successful in future classes but also to be literate citizens of our increasingly global community. Students learn about geographic representations, tools and technologies, and how to use them to gain information and to report information. They investigate how these representations have often been and can still be ethnocentric. They explore the ways that geographical representations, tools, and technologies can be used to gain and report information about places and regions as well as physical and human systems. They begin to use information to evaluate the ways in which the physical and ecosystem features of the Earth impact the characteristics, distribution, and migration of peoples across the Earth's surface. Students are asked to consider the reverse proposition as well and to draw conclusions about how people's actions impact the Earth's physical features and ecosystems, considerations which intersect with study in science classes. Students gain specific geographic competence as much as possible in topic-specific classes. Students studying environmental science will learn about the location of our Earth's biomes and the relationship between location, landforms, climate, and life adaptations. Students studying U. S. history and culture will study U. S. physical and political geography. Students studying Africa will learn the physical features and political geography of that continent, and so forth.

During Middle School, students will engage in a series of social science investigations that introduce them to areas of “social” study while teaching them how to conduct investigations: *how to frame questions, identify relevant materials, conduct research, articulate connections and patterns, draw conclusions, evaluate positions, and present findings*. Our mission as a Quaker school impacts the selection of the defining themes as well as the kinds of questions asked and possibilities considered. The Quaker testimonies of **Simplicity, Peace, Integrity, Community, Equality, and Stewardship** lead us always to ask how the actions of people can make these values become a living, breathing reality.

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. Studies of civics, government and citizenship urge students to be informed and reflective participants in democratic decision-making and social action. 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.

A focus on decision-making has immediate relevance for Middle School students, who must make increasingly independent decisions as they mature into adults. Our investigations into the past, considerations of the present, and imaginative excursions into the future, all prepare students to be decision-makers with integrity and conviction who can analyze a situation to the best of their abilities, recognize their own shortcomings and those of others, yet trust that goodness is at work in the world. Our study of the “social” is framed by Quaker mission and values, which impacts our perspective but does not limit the events we consider or the questions we ask.

Our social studies classes are unified at a high level by the investigation of how people in different times and places have established relationships, including people with their environment, with “insiders,” with “outsiders,” and with government and other structured organizations of rule and belief. Students explore how relationships have been established, what kinds of values these relationships encode, and what kind of daily realities get produced for people from different walks of life. The goal is for each student to consider how “I,” how “we,” can contribute to equitable, peaceful, and sustainable relationships. “How can I make a difference?” is the question held continually before our students as they grow and mature.

Text Selection

Textbooks

Oxford University Press, A History of US, by Joy Hakim, Revised Third Edition

National Geographic, National Geographic Student Atlas of the World, Washington, DC, 2005

Learning Objectives

Students will:

- Keep an organized notebook
- Develop planning skills through defining, time-lining, and implementing projects throughout the year.
- Develop collaboration skills through working together in groups.

Literacy Objectives

Students will learn to read expository text for various purposes and develop the skills of independent readers, including:

- Preparing for reading by activating prior knowledge and developing a purpose.
- Answering questions before, during, and after reading.
- Identifying main and supporting ideas.
- Using context clues and skimming for main ideas.
- Negotiating the often specialized vocabulary of the sciences and incorporating unfamiliar terms into personal vocabulary.
- Synthesizing content information through various visual representations of information, including Venn diagrams, concept maps, summaries, and outlines.

Students will:

- Develop their note-taking abilities through guided practice and the maintenance of a journal.
- Develop their written abilities to express queries, observations, and cause-and-effect relationships using precise and, when required, specialized vocabulary.
- Practice writing successful short descriptions, definitions, and explanations.
- Practice written forms specific to social science, such as short research reports.

SKILLS

Students will:

- Identify social studies tools and know how to access and use them.
- Use maps/globes to find specific locations, to describe specific features, or to gather information.
- Use maps/globes to help address questions of human movement, interactions, and activity over time.
- Represent physical space and characteristics through mapping and other forms of representation.
- Differentiate between different kinds of maps (physical, political, topographical, climatological, etc.).
- Develop substantial background knowledge of geographical and political locations and physical features around the world.
- Construct accurate timelines.
- Identify cause and effect as well as other patterns of relationship.
- Assign value and priority to information.
- Draw, test and revise inferences and conclusions.
- Compare and contrast information sets.
- Understand resource allocation at different times in history and how resources impact the distribution of power in a culture.
- Understand historical sequencing and cause and effect.
- Understand how people have worked together for a vision over time and through differences of opinion.
- Understand the relationship between government and people and the processes through which that relationship is defined and modified
- Understand the foundational principles of American democracy and how they continue to impact contemporary debate and policy
- Identify how encounters between cultures, and cultures and the environment, encode power and impact people differently.
- Identify how a people's beliefs and cultural practices impact their actions, relationships, explorations, and habitations.
- Explain how inventions and economies impact culture and vice versa.
- Imagine alternatives to cultural aggression, invasion, exploitation, and domination.
- Appreciate diversity and difference around the world as well as understand how to build bridges and find common ground.
- Understand possible actions that can be undertaken in different socio-political situations to provide assistance, promote intervention, or support transformation.