

Eighth 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 eighth-graders, each of the SPICES plays a role in curricular and co-curricular learning experiences. In social studies, students learn Community, Equality and Peace through students of world cultures. Whether looking at the European colonization of Africa or the conflict over competing religious and political claims to Jerusalem, students are challenged to consider causes of inequality and suffering and to consider how peace might be sought. In science, eighth-graders study Physics and Chemistry, learning about the physical principles and properties which explain the composition of matter and how elements relate and interact, topics which invite a consideration of Integrity within Community. Science and mathematics, areas of study which are intertwined, both value the Simplicity of elegant solutions to problems. Student's study of principles in science connects to their study of principles in social studies as well as social interactions. They reflect upon how to maintain personal Integrity while being part of a Community. The topics and issues correspond well to the eighth-grade Language Arts themes of Independence and Responsibility. The Buddy Program offers our oldest students the experience of mentoring our youngest students. Buddies engage in reading together, playing outdoor games, exchanging cards and hallway waves, painting pumpkins, and other seasonal activities. Serving as mentors allows Big Buddies to stretch into their wiser, more mature selves as they prepare for graduation and high school. Big Buddies guide their Little Buddies as they learn about school routines, the Quaker SPICES, Silent Meeting, and friendships based on respect and acceptance. In the words of one eighth-grader (class of '21): "Little Buddies are younger versions of ourselves. They make us remember who we were and want to become."

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

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

PFACE

- 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

PEACE (continued)

- 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
- 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

COMMUNITY (continued)

- 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. **Seventh Graders are asked to contribute twenty hours of community service and thirty 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.

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 while 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.

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)

- Set materials up for class before the teacher begins
- Complete homework each night with care and effort
- 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, et 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

Academic Subjects

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Language Arts

Text Selection Textbooks

Daily Grammar Practice Grade 7

Additional Materials Include

Friends Council on Education, Tuning In: Mindfulness in Teaching and Learning

Great Source, Reader's Handbook Houghton Mifflin English, Grades 7 & 8

Kylene Beers, When Kids Can't Read

Fisher, Brozo, Frye, Ivey, 50 Instructional Routines to Develop Content Literacy

Mignon Fogarty, The Grammar Girl's Quick and Dirty Tips for Better Writing

Rachel Kessler, The Soul of Education

Marzano, Pickering, Pollack, Classroom Instruction that Works

Origins, Developmental Designs Resource Books 1 & 2

Parker Palmer, The Courage to Teach

Laura Robb, Differentiating Reading Instruction

Strunk & White, The Elements of Style

Cris Tovani, Do I Really Have to Teach Reading?, I Read It But I Don't Get It: Comprehension Strategies for Adolescent Readers, So What Do They Really Know: Assessment That Informs Teaching and Learning

Susan Winebrenner, Teaching Gifted Kids in the Regular Classroom

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 lifetime. 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 of 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 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 seventh grade connects to students' personal and curricular experiences in other classes: Independence and Responsibility.

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 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 minilessons 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.

SKILLS

Reading

Reading Informational Text

Students will:

Key Ideas and Details

- Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
- Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.
- Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).

Craft and Structure

- Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings;
- Analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
- Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.
- Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.
- Integration of Knowledge and Ideas
- Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.
- Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.
- Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.

Range of Reading and Level of Text Complexity

• By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.

Reading Literature

Students will:

Key Ideas and Details

- Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
- Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.
- Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.

Craft and Structure

- Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
- Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.
- Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.
- Integration of Knowledge and Ideas

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- Integration of Knowledge and Ideas
 - Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).
 - Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.
- Range of Reading and Complexity of Text
 - By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Writing

Text Types and Purposes

- Write arguments to support claims with clear reasons and relevant evidence.
 - Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
 - Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.
 - Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.
 - Establish and maintain a formal style.
 - Provide a concluding statement or section that follows from and supports the argument presented.
- Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
 - Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aid comprehension.
 - Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
 - Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
 - Use precise language and domain-specific vocabulary to inform about or explain the topic.
 - Establish and maintain a formal style.
 - Provide a concluding statement or section that follows from and supports the information or explanation presented.

- Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.
 - Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.
 - Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters.
 - Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events.
 - Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.
 - Provide a conclusion that follows from and reflects on the narrated experiences or events

Production and Distribution of Writing

Students will:

- Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade- specific expectations for writing types are defined in standards 1–3 above.)
- With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well the purpose and audience have been addressed.
- Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.

Research to Build and Present Knowledge

- Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.
- Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.

- Apply grade 8 Reading standards to literature (e.g., "Analyze how a modern work of fiction draws on themes, patterns of events or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new").
- Apply grade 8 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced").

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.

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 verbals (gerunds, participles, infinitives) in general and their function in particular sentences.
 - Form and use verbs in the active and passive voice.
 - Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.
 - Recognize and correct inappropriate shifts in verb voice and mood.
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - Use punctuation (comma, ellipsis, dash) to indicate a pause or break.
 - Use an ellipsis to indicate an omission.
 - Spell correctly.

Knowledge of Language

- Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).

Vocabulary Acquisition and Use

Students will:

- Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.
 - Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
 - Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede).
 - Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
 - Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
- Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
 - Interpret figures of speech (e.g. verbal irony, puns) in context.
 - Use the relationship between particular words to better understand each of the words.
 - Distinguish among the connotations (associations) of words with similar denotations (definitions)(e.g., bullheaded, willful, firm, persistent, resolute).
- Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Speaking and Listening

Comprehension and Collaboration

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.
 - Come to discussions prepared, having read or researched material under study;
 explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
 - Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.
 - Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.

- Acknowledge new information expressed by others and, when warranted, modify their own views.
- Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.
- Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.

Presentation of Knowledge and Ideas

Students will:

- Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.
- Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
- Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

Mathematics

The mathematics program strives to develop sound mathematical understanding, procedural fluidity and accurate computational skills that can be combined for effective use in a variety of situations. Our goal is for students to internalize concepts to the point of ownership in order to orchestrate them with confidence as required by different problem-solving situations. We hope for students to develop this conceptual facility as opposed to a mechanical application of routines and formulas, for it is in conceptual flexibility, adaptation and application that true mathematical reasoning resides. At the same time, we do not intend to undervalue the importance of procedural fluidity and computational accuracy, which, in combination with conceptual understanding, transforms students into successful mathematical practitioners. To achieve these goals, teachers adapt instruction to students' learning styles and needs, utilizing a variety of instructional modalities and methods in order to teach to strengths and address skill and concept gaps. Teachers engage frequently with each learner to assess how best to deliver instruction, optimal practice, and enrichment opportunities to extend and deepen learning.

The Friends School of Atlanta uses **Everyday Mathematics**, which is consistent with the elementary curriculum, and is in the process of transitioning to **USCSMP Grades 6-12** for sixth, seventh and eighth grade math classes. Both **Everyday Mathematics and USCSMP Grades 6-12 (Chicago Math)** have been developed by The University of Chicago School Math Project to provide "a continuous Pre-K through Grade 12 curriculum with an articulated sequence of conceptual understanding, skills development, problem solving, and reasoning." The **UCSMP** primary and secondary programs reflect 1) children's experience and interests; 2) learning research; and 3) content and instructional standards identified by the National Council of Teachers of Mathematics.

PACING IN Middle School MATH

Much has been written about the critical role of algebra in determining a student's ability to be successful in higher-level math courses and as a gatekeeper course for post-secondary education. **Everyday Mathematics**, which includes an algebra strand, begins preparing students at a young age. Nevertheless, algebra, which requires students to grasp symbolic representation, is assisted by students' development of abstract cognition in the Middle School years. Because students make this cognitive transition at different times, their readiness for algebra varies as does their appetite for mathematical challenge and their confidence and facility with procedures and operations. At FSA, we have designed our math program to account for these differences and to allow students to move at a pace well-suited to their learning styles and interests. Central to the structure of our program is the belief that each and every student should develop proficiency in algebraic concepts fully and well and should be given the time and the methods of instruction that it takes to do so. The typical path takes students through 5th Grade Math, UCSMP Pre-Transition Math in the 6th Grade, Transition Math in 7th Grade, and Algebra in 8th grade. This curriculum positions students to transition into high school having completed a year of algebra instruction.

As students move into higher-level math courses, the first of which is Algebra, pacing becomes an important factor in the kinds and levels of classes a student takes. Students with an intuitive grasp of mathematical concepts, well-developed abstract cognition, and a strong appetite for math are often able to learn at a more rapid pace. They require less conceptual explanation, fewer modalities of demonstration and practice, and many fewer practice and review problems to achieve proficiency. At FSA, students who demonstrate these mathematical strengths at the end of 6th Grade Pre-Transition Math have the opportunity to move directly into Algebra in 7th grade, bypassing Transition Math. Readiness is demonstrated by

At FSA, students who demonstrate these mathematical strengths at the end of 6th Grade Pre-Transition Math have the opportunity to move directly into Algebra in 7th grade, bypassing Transition Math. Readiness is demonstrated by:

- a cumulative average in 6th grade Pre-Transition Math of 90%
- a homework completion rate in 6th grade Pre-Transition of 95%
- a target score on an algebra readiness test
- no more than 15 absences and 5 tardies

Students who take Algebra and maintain the 90% (or higher) average in the 7th grade move into Advanced Algebra Review and Geometry in the 8th grade. This alternate path (5th Grade Math, 6th Grade Pre-Transition Math, Algebra, Algebra Review/Geometry) is well-suited for students who have high mathematical aptitude and who really love math. In the event that a student enters Algebra in the seventh grade and struggles, teacher, parent(s) and student will conference about how to address the difficulty. Typically students should aim to maintain a 90% or higher average and 95% homework completion rate.

Moving more quickly along the math path is not recommended or desirable for everyone or even for most students. The priority is learning Algebra fully and well at the point in a student's development when that learning is supported cognitively. Any student who has had Algebra before entering high school is already at an advantage. Not surprisingly, some students do not fully build proficiency in algebraic concepts in one year. At FSA, these students are identified by a cumulative grade average in Algebra that continues to fall below an 85% or that is maintained with a number of modifications. These students are given credit for Introduction to Algebra and are on track for a second year of Algebra. In summary, Introduction to Algebra is not a separate course from Algebra but is determined by a student's degree of proficiency of algebraic concepts as indicated by a cumulative grade average in combination with modifications.

It is important to recognize that faster isn't always better. The ideal class for each student has an appropriate pace that allows for comprehensive proficiency of material without the drag of frequent boredom. Too little explanation and practice can be as detrimental to learning as too much. Discovery of a student's successful learning pace can have a positive and long-term impact. We believe that successful proficiency at any pace, so long as it is a productive match, builds confidence, resilience and enjoyment of math.

All students in FSA math classes are assessed according to degree of proficiency in these categories: **computation/accuracy**; **sequencing** (correct steps in correct order); **application** (including word problems); **concepts.**

Standard Math

Rapid Pace Math

7th Grade Transition Math 8th Grade Algebra

Algebra Review + Geometry

Learning Objectives

<u>University of Chicago School Math Project: Transition Math, Algebra, and Geometry</u>

<u>From "The University of Chicago Mathematics Project Curriculum Alignment"</u>

UCSMP 6-12 provides a developmental curriculum with a goal of upgrading student achievement. The program offers materials appropriate to the goal of having Algebra taught to eighth-graders. Another goal is to increase the number of students who take math classes beyond Algebra and Geometry.

In addition, the developers of **UCSMP 6-12** affirm the importance of an up-to-date curriculum by including current technology, statistical ideas, discrete mathematics, and applications. The enriched context of **UCSMP 6-12** includes more statistics and transformational geometry at every level than traditional math programs. There are numerous opportunities for problem-solving with real-world applications in order to prepare students for job opportunities related to computers, technology, and information.

UCSMP 6-12 provides students with multiple opportunities to read and write mathematical language. As they become familiar with and then adept users of mathematical vocabulary and symbols, students increase their ability to navigate a wide range of textbooks, problems, and situations with success and confidence. Students are also invited to explore connections between mathematics and other disciplines.

As in **Everyday Mathematics, UCSMP** recognizes that students learn best when they are active and involved in dynamic instructional situations which have been adapted to students' differing strengths and needs. Differentiated instructional support and independent learning are fostered by the multi- dimensional **SPUR** approach, which defines four dimensions of mathematical understanding: **Skills, Properties, Uses, and Representations.**

Students' zone of proximal development can be addressed in part by working more intensively in one of the SPUR dimensions and by varying the number and depth of dimensions.

- **S:** Skills understanding means knowing a way to obtain a solution.
- **P:** Properties understanding means knowing properties which you can apply. (Identify or justify the steps in obtaining an answer.)
- **U:** Uses understanding means knowing situations in which you could apply the solving of this equation. (Set up or interpret a solution.)
- **R:** Representations understanding means having a representation of the solving process or graphical way of interpreting the solution.

Finally, **UCSMP 6-12** organizes student learning to improve performance by structuring instruction according to how students learn best. Each lesson begins with Mental Math to provide ongoing practice. Each lesson ends with review questions designed to engage students in concepts from different perspectives. Students are given numerous opportunities for concept and skill and assessment opportunities that allow students to identify areas for further study and practice. Students are encouraged to explore four types of questions: **Covering the Ideas questions, Applying the Mathematics questions, Review questions, and Exploration questions (CARE).**

8th Grade Math: Algebra Key Content Themes

Algebra has a scope far wider than most other algebra texts, with mathematical topics integrated throughout. In addition to the contexts provided by statistics, geometry, and probability, expressions, equations, and functions are described graphically, symbolically, and in tables. Graphing calculators are assumed for home use, while computer algebra system (CAS) technology is used in the classroom.

Chapter 1: Using Algebra to Describe

- **1-1** Evaluating Expressions
- **1-2** Describing Patterns
- **1-3** Equivalent Expressions
- **1-4** Picturing Expressions
- **1-5** Using a Graphing Calculator
- **1-6** Absolute Value and Distance
- 1-7 Data and Spread

Chapter 2: Using Algebra to Explain

- **2-1** The Distributive Property and Removing Parentheses
- **2-2** The Distributive Property and Adding Like Terms
- **2-3** Explaining Number Puzzles
- 2-4 Opposites
- **2-5** Testing Equivalence
- **2-6** Equivalent Expressions with Technology
- **2-7** Explaining Addition and Subtraction Related Facts
- **2-8** Explaining Multiplication and Division Related Facts

Chapter 3: Linear Equations and Inequalities

- **3-1** Graphing Linear Patterns
- **3-2** Solving Equations with Tables and Graphs
- **3-3** Solving Equations by Creating Equivalent Equations
- **3-4** Solving ax + b = c 144
- **3-5** Using the Distributive Property in Solving Equations 3-6 Inequalities and Multiplication
- **3-6** Solving ax + b < c
- **3-7** Solving Equations by Clearing Fractions

Chapter 4: More Linear Equations and Inequalities

- **4-1** Solving Percent Problems Using Equations
- 4-2 Horizontal and Vertical Lines
- **4-3** Using Tables and Graphs to Solve 4-4 Solving ax + b = cx + d
- **4-4** Solving ax + b < cx + d
- **4-5** Situations That Always or Never Happen
- **4-7** Equivalent Formulas
- **4-8** Compound Inequalities, AND and OR
- 4-9 Solving Absolute Value Equations and Inequalities

Chapter 5: Division and Proportions in Algebra

- **5-1** Multiplication of Algebraic Fractions
- **5-2** Division of Algebraic Fractions
- **5-3** Rates
- **5-4** Multiplying and Dividing Rates
- **5-5** Ratios
- **5-6** Probability Distributions
- **5-7** Relative Frequency and Percentiles
- **5-8** Probability without Counting
- **5-9** Proportions
- **5-10** Similar Figures

Chapter 6: Slopes and Lines

- **6-1** Rate of Change
- **6-2** The Slope of a Line
- **6-3** Properties of Slope
- **6-4** Slope-Intercept Equations for Lines
- 6-5 Equations for Lines with a Given Point and Slope
- **6-6** Equations for Lines through Two Points
- **6-7** Fitting a Line to Data
- **6-8** Standard Form of the Equation of a Line
- **6-9** Graphing Linear Inequalities

Chapter 7: Using Algebra to Describe Patterns of Change

- **7-1** Compound Interest
- **7-2** Exponential Growth
- **7-3** Exponential Decay
- **7-4** Modeling Exponential Growth and Decay
- **7-5** The Language of Functions
- **7-6** Function Notation
- **7-7** Comparing Linear Increase and Exponential Growth

Chapter 8: Powers and Roots

- **8-1** The Multiplication Counting Principle
- **8-2** Products and Powers of Powers
- 8-3 Quotients of Powers
- **8-4** Negative Exponents
- **8-5** Powers of Products and Quotients
- **8-6** Square Roots and Cube Roots
- **8-7** Multiplying and Dividing Square Roots
- **8-8** Distance in a Plane
- **8-9** Remembering Properties of Powers and Roots

Chapter 9: Quadratic Equations and Functions

- **9-1** The Function with Equation y = ax2
- **9-2** Solving ax2= b
- **9-3** Graphing y = ax2 + bx + c
- **9-4** Quadratics and Projectiles
- 9-5 The Quadratic Formula
- **9-6** Analyzing Solutions to Quadratic Equations
- 9-7 More Applications of Quadratics: Why Quadratics Are Important

Chapter 10: Linear Systems

- **10-1** An Introduction to Systems
- **10-2** Solving Systems Using Substitution
- **10-3** More Uses of Substitution
- **10-4** Solving Systems by Addition
- **10-5** Solving Systems by Multiplication
- **10-6** Systems and Parallel Lines
- **10-7** Matrices and Matrix Multiplication
- **10-8** Using Matrices to Solve Systems
- **10-9** Systems of Inequalities
- **10-10** Nonlinear Systems

Chapter 11: Polynomials

- **11-1** Investments and Polynomials
- **11-2** Classifying Polynomials
- **11-3** Multiplying a Polynomial by a Monomial
- **11-4** Common Monomial Factoring
- **11-5** Multiplying Polynomials
- **11-6** Special Binomial Products
- **11-7** Permutations
- **11-8** The Chi-Square Statistic

Chapter 12: More Work with Quadratics

- **12-1** Graphing y k = a(x h)2
- **12-2** Completing the Square
- 12-3 The Factored Form of a Quadratic Function
- **12-4** Factoring x2 + bx + c
- **12-5** Factoring ax2 + bx + c
- **12-6** Which Quadratic Expressions Are Factorable?
- **12-7** Graphs of Polynomial Functions of Higher Degree
- 12-8 Factoring and Rational Expressions

Chapter 13: Using Algebra to Prove

- **13-1** If-Then Statements
- 13-2 The Converse of an If-Then Statement
- **13-3** Solving Equations as Proofs
- **13-4** A History and Proof of the Quadratic Formula
- **13-5** Proofs of Divisibility Properties
- **13-6** From Number Puzzles to Properties of Integers
- 13-7 Rational Numbers and Irrational Numbers
- **13-8** Proofs of the Pythagorean Theorem

8th GRADE RAPID PACE MATH: ALGEBRA KEY CONTENT THEMES

Geometry integrates coordinates and transformations throughout, and gives strong attention to measurement formulas and three-dimensional figures. Work with proof writing follows a carefully sequenced development of the logical and conceptual precursors to proof. UCSMP Geometry assumes that students have a graphing calculator and access to a dynamic geometry system (DGS) such as The Geometer's Sketchpad.

Chapter 1: Points and Lines

- **1-1** Points and Lines as Locations
- **1-2** Ordered Pairs as Points
- **1-3** Other Types of Geometry
- **1-4** Undefined Terms and First Definitions
- **1-5** Postulates for Points and Lines in Euclidean Geometry
- **1-6** Betweenness and Distance
- **1-7** Using a Dynamic Geometry System (DGS)

Chapter 2: The Language and Logic of Geometry

- **2-1** The Need for Definitions
- **2-2** Conditional Statements
- **2-3** Converses
- **2-4** Good Definitions
- **2-5** Unions and Intersections of Figures 8
- 2-6 Polygons
- 2-7 Conjecture

Chapter 3: Angles and Lines

- **3-1** Arcs and Angles
- **3-2** Rotations
- 3-3 Adjacent and Vertical Angles
- **3-4** Algebra Properties Used in Geometry
- **3-5** Justifying Conclusions
- **3-6** Parallel Lines
- **3-7** Size Transformations
- **3-8** Perpendicular Lines
- **3-9** The Perpendicular Bisector

Chapter 4: Congruence Transformations

- **4-1** Revelecting Points
- **4-2** Reflecting Figures
- 4-3 Miniature Golf and Billiards
- **4-4** Composing Reflections over Parallel Lines
- **4-5** Composing Reflections over Intersecting Lines
- **4-6** Translations as Vectors
- **4-7** Isometries
- 4-8 Transformations and Music

Chapter 5: Proofs Using Congruence

- **5-1** When Are Figures Congruent?
- **5-2** Corresponding Parts of Congruent Figures
- **5-3** One-Step Congruence Proofs
- **5-4** Proofs Using Transitivity
- **5-5** Proofs Using Reflections
- **5-6** Auxiliary Figures and Uniqueness
- **5-7** Sums of Angle Measures in Polygons

Chapter 6: Polygons and Symmetry

- **6-1** Reflection Symmetry
- **6-2** Isosceles Triangles
- 6-3 Angles Inscribed in Circles
- **6-4** Types of Quadrilaterals
- **6-5** Properties of Kites
- **6-6** Properties of Trapezoids
- **6-7** Rotation Symmetry
- **6-8** Regular Polygons
- **6-9** Frieze Patterns

Chapter 7: Applications of Congruent Triangles

- **7-1** Drawing Triangles
- **7-2** Triangle Congruence Theorems
- **7-3** Using Triangle Congruence Theorems
- **7-4** Overlapping Triangles
- **7-5** The SSA Condition and HL Congruence
- **7-6** Tessellations
- **7-7** Properties of Parallelograms
- **7-8** Sufficient Conditions for Parallelograms
- **7-9** Diagonals of Quadrilaterals
- **7-10** Proving That Constructions Are Valid

Chapter 8: Lengths and Areas

- 8-1 Perimeter
- **8-2** Fundamental Properties of Area
- **8-3** Areas of Irregular Figures
- **8-4** Areas of Triangles
- **8-5** Areas of Quadrilaterals
- **8-6** The Pythagorean Theorem
- 8-7 Special Right Triangles
- **8-8** Arc Length and Circumference
- **8-9** The Area of a Circle

Chapter 9: Three-Dimensional Figures

- 9-1 Points, Lines, and Planes in Space
- 9-2 Prisms and Cylinders
- 9-3 Pyramids and Cones
- **9-4** Drawing in Perspective
- 9-5 Views of Solids and Surfaces
- **9-6** Spheres and Sections
- 9-7 Reflections in Space
- 9-8 Making Polyhedra and Other Surfaces
- **9-9** Surface Areas of Prisms and Cylinders
- 9-10 Surface Areas of Pyramids and Cones

Chapter 10: Formulas for Volume

- 10-1 Fundamental Properties of Volume
- 10-2 Multiplication, Area, and Volume
- **10-3** Volumes of Prisms and Cylinders
- **10-4** Volumes of Pyramids and Cones
- **10-5** Organizing and Remembering Formulas
- **10-6** The Volume of a Sphere
- **10-7** The Surface Area of a Sphere

Chapter 11: Indirect Proofs and Coordinate Proofs

- **11-1** Ruling Out Possibilities
- **11-2** The Logic of Making Conclusions
- **11-3** Indirect Proof
- **11-4** Proofs with Coordinates
- **11-5** The Pythagorean Distance Formula
- **11-6** Equations of Circles
- 11-7 Means and Midpoints
- **11-8** Theorems Involving Midpoints
- **11-9** Three-Dimensional Coordinates

Chapter 12: Similarity

- 12-1 Size Transformations Revisited
- **12-2** Review of Ratios and Proportions
- **12-3** Similar Figures
- **12-4** The Fundamental Theorem of Similarity
- 12-5 Can There Be Giants?
- **12-6** The SSS Similarity Theorem
- **12-7** The AA and SAS Triangle Similarity Theorems

Chapter 13: Similar Triangles and Trigonometry

- **13-1** The Side-Splitting Theorems
- **13-2** The Angle Bisector Theorem
- 13-3 Geometric Means in Right Triangles
- 13-4 The Golden Ratio
- **13-5** The Tangent of an Angle
- 13-6 The Sine and Cosine Ratios

Science

Our Middle School science program is designed to introduce students to important scientific concepts while providing numerous opportunities for students to investigate and explore through hands-on activities, experiments and demonstrations. Students have many opportunities to learn how to think scientifically: to ask questions, use tools, collect data, make observations, generate hypotheses, conduct tests, interpret observations and data, and analyze results. They gain experience with a variety of devices and tools. They begin to learn how to express measurements, relationships and equations as well as how to use diagrams and graphs.

They have opportunities to learn about and practice basic experimental design. Finally, they gain experience with expressing concepts and findings scientifically, including how to comprehend scientific writing, negotiate terminology, write sentences that articulate scientific relationships such as cause and effect, and compose subject-specific texts such as research papers and lab reports.

Disciplined and creative scientific thinking is built on a foundation of concepts and information. Our science program introduces students to substantial scientific content and builds their knowledge-base for future studies. The curriculum is organized topically and

covers, over four years, a total of seven topics across the earth sciences, physical sciences, and biological sciences. Teachers use a variety of teaching methods and resources as they introduce and deepen students' scientific knowledge. In addition to hands-on activities and experiments, teachers present concepts through lecture and discussion. In addition, students read about and review concepts using a leading Middle School science program, Prentice-Hall Science Explorer. The textbooks join content with hands-on scientific inquiry while also providing reading and study assistance. Teachers complement textbook study with enrichment materials they have collected themselves to pique students' interest and to encourage connections between scientific discoveries and daily experiences. Students apply and synthesize new concepts through problem-solving investigations and creative projects. In science classes, students hear about, read about, write about, talk about, ask questions about, and do something with the new concepts to which they have been exposed.

All students in science are assessed according to relative proficiency in these categories: reading scientific material; following steps in experiments and lab processes; build proficiency ining scientific concepts; representing and communicating scientific knowledge. Some teachers combine reading and representation in a category entitled scientific literacy.

FSA follows the endorsement of teaching evolutionary science by the National Science Teachers Association (NSTA). Their position statement can be found <u>here</u>.

Chart of Middle School Science Topics

Grade	Semester 1	Semester 2
5th Grade	Interdisciplinary Environmental Studies	Interdisciplinary Environmental Studies
6th Grade	Human Body and Genetics	Animal Kingdoms
7th Grade	Astronomy	Non-Animal Kingdoms
8th Grade	Chemistry	Physics

Text Selection Textbooks

Prentice Hall Science *Explorer Motion, Forces, and Energy*Prentice Hall Science *Explorer, Chemical Interactions*

Key Content Themes

CHEMISTRY

- Periodic table of elements.
- Atoms, molecules, and their isotopes
- Molecular formulas
- Ionic and covalent bonds
- Chemical equations
- Water displacement to determine volume
- Density of an object
- Chemical and physical changes
- Acids, bases and pH

Physics

- Motion, Forces, and Energy
- Motion, Forces, Forces in Fluids, Work and Machines, Energy, Thermal Energy and Heat
- Modern Physics
- What physicists do today, how physics impacts society, and mind blowing discoveries in physics

Learning and Literacy Objectives

Students will:

- Ask quality questions.
- Collaborate in groups to answer scientific questions through investigations.
- 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.
 - Interpreting graphs, tables and charts.
 - Synthesizing content information through various visual representations of information including Venn diagrams, concept maps, summaries, and outlines.
- Develop their note taking abilities.
- Organize data into graphs, tables and charts.

- Practice writing successful short descriptions, definitions, and explanations.
- Practice written forms specific to science such as short lab and research reports.
- Develop strategies for internalizing information and concepts.
- Develop their planning skills through defining, time-lining, and implementing projects throughout the year.
- Communicate scientific ideas and explanations based on evidence in written and verbal form.
- Develop their written abilities to express queries, observations, and cause and effect relationships using precise and, when
- required, specialized vocabulary.
- Engage in dialogue and civil debate as scientific ideas are probed and revised.

SKILLS

- Begin to develop their understanding of the work of scientists through inquiry.
- Learn about the kinds of questions scientists ask and methods scientists use.
- Use scientific tools.
- Make detailed and precise observations.
- Collect and organize data.
- Use proper units in scientific expressions and measurement.
- Calculate conversions of measurement.
- Identify cause and effect.
- Identify like and unlike characteristics.
- Make predictions.
- Construct explanations and hypotheses.
- Develop knowledge of the scientific method.
- Design investigations to test explanations and hypotheses.
- Record investigations clearly and accurately.
- Recognize the importance of explaining data with precision and accuracy.
- Recognize the importance of double-checking steps, records, and reasoning.
- Follow directions and sequence of steps in performing experiments.
- Implement safe practices when conducting experiments.
- Continue to develop the habits of asking quality questions and following the lead of curiosity.
- Analyze/organize scientific data via calculations and inference.
- Begin to understand that there are many ways to interpret a set of data.
- Represent data using charts and diagrams.
- Label scientific diagrams and models.
- Identify patterns and anomalies.

- Begin to understand the methods and limitations of categorization and taxonomies.
- Independently ask questions, designs and implements investigations to construct new knowledge.
- Begin to develop their ability to look at science through a critical lens.
- Learn to question and analyze scientific ideas.
- Begin to understand how modern inventions and technology have resulted from scientific inquiry and investigation.
- Begin to understand how culture impacts which scientific and social scientific knowledge is valued, what science is, and who is a scientist.
- Begin to develop an awareness of the ways in which their own values and beliefs impact what they discover (or not) and how they interact with others and their environment.
- Recognize the inevitability and creative opportunity of mistakes.

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 and economics, 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.

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.

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.

In our seventh and eighth grades, we have selected cultures to study that illuminate current cultural attitudes and national politics/policies in order that we might reflect upon equity and peace in our own country and our global community. Additionally, the regions we examine connect to tell a World Historical Story of Global Convergence that is still unfolding.

One year of seventh and eighth grade social studies involves study of the Foundations of Europe (with Islamic Spain and England as case studies) as well as African Studies (With Mali and Rwanda as focal points). This pairing of investigative areas allows students to learn about the forces that led to empire building, the politics of colonialism, as well as slavery and forced migration. We take a comparative look at the long-standing cultural and economic ties in the eastern hemisphere as well as the legacy of conquest and exploitation.

The World Historical Story of Global Convergence continues in the second year of the sequence with the collision of society, politics and economic ties between the Americas and the eastern hemisphere. In this year, we focus on Latin American and the Caribbean and Asian studies. We selected these as topics because of critical current debates in American policy and frequent stereotypes in American popular culture. Additionally, the forces of global capitalism inserts Americans as powerful agents of consumption, and so we examine many of the product histories such as sugar and illicit drug trafficking that shape our relationships. So, while we hope through exposure and study, we can develop a more accurate and compassionate understanding of the people in these cultures we also hope to turn the lens on our own responsibility as consumers with the privilege of choice in shaping the kind of world we wish to see.

Goals for Social Studies:

- Creating conscious, global citizens who have the tools to understand the world and our place within it
- Making students aware of the underlying patterns of world historical and current events
- Developing critical and analytical thinking skills what Quakers call "discernment", questioning why things are the way they are
- Developing critical skills to being a successful student in social studies especially:
 - note taking in a variety of settings
 - preparing for assessments
 - representing knowledge in writing, visually, and orally
 - organizing materials for speedy retrieval
- Building awareness for Quakers and Quaker solutions in the world

How we do this:

- Current events & geographical awareness
- Telling the World Historical Story of Global Convergence, exploring the linkages and the recurring patterns
- Practice, practice, practice

Things we do in and out of class (generally) for our topics:

- Read something about the topic
- Respond in writing/orally/visually to questions about the reading
- Listen and take notes on the unit theme
- Prepare for and have an assessment on the unit
- Complete some kind of hands-on project/presentation about the unit

Text Selection Text Book

Merriam-Webster, Notebook Atlas

Additional Materials Include

American Friends Service Council, Resources and Website Prentice Pearson Hall, World Studies Stanford Program on International and Cross-Curricular Education, Geography Resources

7th and 8th Grade Sample Curriculum

Year One:

Foundations of Europe – Fall

- Islamic Spain
- The Crusades
- Feudalism
- Religion Catholicism, the Protestant Reformation, Quakerism
- London demographic shifts, London, the plague, Shakespeare
- Rural English Life Tales from the Green Valley
- Elizabeth I and her Legacy of Empire

African Studies - Spring

- A Focus on Genocide
- Mali: A Case Study
- Our African Beginnings
- Ancient Cultures, Kingdoms, City-states, Empires
- The TransAtlantic Slave Trade vs. East African Slave Trade
- (Mis)Perceptions of Africa
- Post-Colonialism Afropop unit
- Contemporary African Issues: Apartheid, Rwanda's genocide, Truth, Reconciliation and Renewal

Year Two

Latin America - Fall

- Haiti/The Dominican Republic
- Cuba
- Costa Rica (esp. Quakerism in Costa Rica, Quaker coffee in CR!)
- Central America: U.S. intervention and contemporary immigration stories...
- Product history: sugar cane, bananas, cut flowers/cocaine, coffee, chocolate, United Fruit Company, US drug policy

Asian Studies - Spring

- Mini-unit on economics: How a T-Shirt Gets Made
- Islam/Judaism/Buddhism/Hinduism
- The Arab Spring
- Israel/Palestine
- The Silk Road
- The Wars in Iraq/Afghanistan
- Iran

Geography and More

- Current events from our four regions
- Political map of regions
- Other contemporary topics from our four regions, i.e., the European Union/Brexit, human trafficking, the Alt-Right, personal finance
- Quaker perspectives
- The Great Cultural Connectors: sports, music, food!

Learning and Literacy Objectives

Students will:

- Keep an organized notebook
- Take notes during class and from reading using graphic organizers as well as studentinitiated formats and computer tools
- Communicate with other students and teachers to improve notes
- Read directions, interpret questions, and provide appropriate and complete answers to questions
- Compose questions to further understanding
- Generate productive questions to ask of a text
- Translate information into one's "own words"
- Identify relevant resources
- Understand the difference between using the words of others and one's own words by including appropriate citations for sources
- Use non-fiction texts (table of contents, glossaries, indices, maps, graphs, side-bars, headings, textual cues)
- Find the main idea and supporting points when reading social science
- Conduct research: asking questions, refining questions, finding resources, accumulating information, tracking information and sources, citation of sources
- Study for different kinds of tests in order to develop proficiency in concepts and build foundational knowledge
- Develop project plans for long-term assignments
- Represent social science knowledge in a variety of formats
- Find and interpret primary sources
- Distinguish between fact and opinion
- Evaluate secondary sources for credibility and bias
- Demonstrate knowledge of textual reference, citation, and appropriate use of others' work
- Identify the steps of a writer's argument
- Identify the writer's point of view and grounding assumptions
- Understand and use statistics, graphs, charts, and other representations of data
- Present synthesized information in a variety of forms such as debate, oral or written report, research paper, or creative applications

SKILLS

Students will:

- Identify social studies tools and knows 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
- Understand how maps can encode ethnocentricity and evaluate maps from this perspective
- Reflect upon the roles we are asked to play and make intentional decisions about inhabiting those roles in order to build individual integrity and community responsibility
- Explain cause and effect as well as other patterns of relationships between historical events, agents, and inventions
- Make connections by identifying themes, patterns, or points of identification
- Make connections between past and present and identifying themes debated through time
- Understand the relationships between cultural beliefs, social practices and personal identity
- Explain the beliefs of a variety of religions and how those beliefs and practices impact historical events and change as well as social relationships
- Identify historical catalysts and trace cultural change
- Identify the interests and values of historical agents
- Understand the personal implications of historical or cultural events and debates
- Understand why history matters and how to be a student of history

Second Language Learning in the Middle School

In the fifth and sixth grades, students continue the study of Spanish begun in elementary school. For two days a week, forty-five minutes per class, students have opportunities to learn about the Spanish language and Spanish-speaking cultures. Beginning in the seventh grade, students have the choice to learn either Spanish or Latin. Unlike second language instruction in previous grades, which is focused on linguistic and cultural exposure, upper Middle School instruction inducts students into the comprehensive body of knowledge that constitutes formal study of a language. A fundamental goal is learning how to learn a language, which provides a scaffold upon which any number of languages might be more easily learned in high school. In addition, Middle School Spanish and Latin aim to develop an introductory fluency in the language along with an understanding of the grammatical terms used to define, speak about, and manipulate the language. Finally, students study the language as it relates to the culture(s) in which it is/was spoken, involving them in learning about histories, cultures, and literatures of other countries and other periods.

Spanish

Students at the Friends School of Atlanta learn Spanish by focusing on vocabulary, grammatical structures and the culture, and the history and geography of the countries where the language is spoken. In the early elementary grades students learn a basic vocabulary that is expanded on in the later elementary grades. This vocabulary includes things like greetings, numbers and colors. In the later elementary grades the students acquire the grammatical foundation necessary for learning any language. Students in fifth and sixth grades have two forty-five minute classes a week. Classes vary in size from ten to fifteen students. We have a library with over a hundred books in Spanish, many of them translations of well known stories in English and many published by the Mexican government for their own school system, graciously donated by the local Mexican Council.

Students in the seventh and eighth grades have four forty minute classes a week with approximately ten students per class and we follow the **Bienvenidos Spanish** course published by Glencoe/McGraw-Hill, a program that is widely used in public schools. Students learn the mechanics of language and how to organize a sentence in a way that roots and endings, nouns, verbs, adjectives, articles and pronouns match and create meaning. Students also learn the origins of words in Spanish and English in order to identify relationships between the words in both languages. By comparing and learning the differences between both languages students understand that there are other valid ways to achieve meaning.

Together with the learning of the language, students learn about the cultures and lifestyles of people that live in the areas where Spanish is spoken. Students learn the formalities of respect that are inherent in the Spanish language. Traditional stories are used as a learning tool. Working with stories serves a dual function. Students learn about Spanish culture as they practice the language. Students then use these stories as a base for creating their own stories in Spanish. This added element reinforces student fluency with the written language as it connects students on a personal level to the material.

At the Friends School of Atlanta students achieve an introductory fluency in Spanish. They develop a respect for differences by making connections between the self and the experiences of others.

- Students learn classroom-related vocabulary.
- Students attain conversational competency, including the ability to describe oneself to others and formulate questions.
- Students gain language skills and cultural understandings helpful in traveling.
- Students focus on pronunciation to increase comprehension and communication.
- Students pay attention to Spanish/English cognates and elements that relate to Latin roots.
- Students practice reading stories (both familiar and new) and presenting information in Spanish.
- Students gain respect for the cultural and historical influences that distinguish various Spanish-speaking countries.

Latin

Seventh and eighth graders have the option of taking two years of Latin. The first year begins by inviting students to become conscious of and curious about words. Students learn that words have histories and "family" relationships. They are introduced to ancient languages and learn that many of our words in English have ancient ancestors. They learn that languages are always changing and that words evolve, carrying past conflicts and cultural values with them.

With this understanding that English has many ties to Latin, students begin learning the language itself. The Cambridge Latin Course involves students in sustained translation from the opening of the first chapter. Each chapter contains Latin stories based upon the life and experiences of an ancient Roman family. In addition, students learn a new set of Latin vocabulary words and study English derivatives of those words. They also learn target grammatical concepts and engage in practice exercises. In each chapter, students read about a specific aspect of ancient Roman culture which is also reflected in the Latin translations of that chapter.

Given that Latin is no longer spoken other than in some very select church services, the focus of instruction is on translation from written Latin into English rather than on spoken dialogue. Students are also encouraged to transfer knowledge of Latin vocabulary to analysis of English words and meanings. As they learn Latin, students are exposed to and asked to use the grammatical terms that describe language. At the same time, they are asked to use the language to communicate with each other through letter-writing as they imagine themselves living in ancient Rome. Primary goals of Latin instruction are to excite students' curiosity about and care for the words they use and to build their confidence as learners of another language.

Second-Language Habits, Processes, Skills, Concepts

Study Habits

- Students will learn to study vocabulary by using either a vocabulary notebook, note-cards, or on-line note-cards.
- Students will learn to update their vocabulary list.
- Students will learn to use study aids to assist with language acquisition.
- Students will learn the importance of nightly study and review.

Processes

- To translate methodically into English by attending to details of roots and endings.
- To construct a variety of simple sentences in the second language.
- To listen to and follow dialogue and stories in the second language.
- To add endings appropriately to nouns and verbs (conjugate).
- To do research into language, history and culture.

Skills

- Practicing correct pronunciation.
- Identifying parts of speech.
- Using inflectional endings.
- Generating appropriate syntactic arrangement.
- Using language cards or other aids to match regular verb roots with the proper endings.
- Locate relevant geographical and geopolitical features.
- Relating words to culture and history.
- Intuiting English meanings from second-language word roots.

Concept

- Inflection
- Roots and endings
- Grammar and parts of speech
- Patterns of endings and categories of words
- Word order
- Syntax as related to different languages
- Syntax as related to different sentence forms
- Geography as related to second language
- Impact of language on culture and culture on language
- History and politics of language use

Second-Language Alternative

Some students derive more benefit from reinforcing and consolidating first language skills and academic study habits. Students who have a reading disorder as part of their learning profile, for example, often profit from additional time in the seventh grade devoted to the practice of reading and reading comprehension exercises and assignments. Students who work slowly due to a processing delay sometimes benefit from additional work time during the school day so that homework is more manageable. Students then work on specific tasks under the guidance of a Middle School teacher or in the media lab. These tasks might be computer or text-based. This option is offered on a case-by-case basis in consultation with the advisor, Middle School Head, parents, and student. At the end of the seventh grade, a determination is made as to whether the student will join a second- language class or continue with the skill development alternative.