

Curriculum Overview

Trivium Academy's mission is to provide a quality educational experience to a diverse population by offering a classical education for the modern world that trains children to be lifelong learners who can think and problem solve independently.



Vision

Firmly rooted in teaching practices that date back to Ancient Greece and Rome, the art of teaching the trivium of grammar, logic, and rhetoric creates a classical education. In our modern world, we believe that these three components should not be separated into three distinct units of study over the course of an education but rather that they all should be taught with increasing sophistication each year. Students at all levels will:

- **Engage** in learning in the grammar stage where students learn the fundamentals of various content areas.
- **Examine** information in the logic stage where students begin to ponder and question information.
- **Express** themselves in the rhetoric stage where the information is brought to maturity through the expression and communication of new ideas relating to students' previously gained knowledge.

This progressive take on a classical education provides the strong basis of a liberal arts education. According to the Association of American Colleges and Universities (2014), "A liberal education is a practical education because it develops just those capacities needed by every thinking adult: analytical skills, effective communication, practical intelligence, ethical judgment, and social responsibility."

We want to prepare our students for life outside the schoolhouse walls, and by teaching the TEKS through the lens of the trivium, we can do just that. The flexibility to work in an ever-changing technological world, the creativity to think outside the box and work together to solve problems, the ability and desire to communicate effectively--these are the hallmarks of a lifelong learner, and these are the skills to which employers are increasingly turning in their hiring practices.

Teacher/author Martin Robinson went on a quest similar to ours to find the best method of education for his own child and his students. His book, *Trivium 21C*, documents his journey and shares this conclusion:

The art of grammar highlights the importance of skills, rules, and knowledge drawn from...tradition. The art of dialectic covers critical thinking, analysis, questioning, arguing, discussing, developing enthusiasms, and the need for grit. The art of rhetoric encourages free expression, citizenship, community, and communication. More than the sum of its parts the trivium develops transferable skills that enable individuals and groups to begin to realize their potential....The trivium helps develop free-thinking, independent learners with a sense of responsibility to others. Yet this is nothing new, we get there through ancient traditions to build the knowledge and skills necessary for the future (p. 246-7).



Curriculum Design Process

The instructional program will be centered around the ideas of the trivium of grammar, logic, and rhetoric. Trivium Academy will provide students the opportunity to experience what we call our **Three E's** in every subject and at every grade level.

Engage in Learning: At the grammar stage, there are fundamental facts and skills that students need to learn in order to be successful across the curriculum. We want our students to find the joy in learning and develop the skills necessary to become lifelong learners. As such, the students must be given the opportunity to actively engage in the lessons. The use of interest inventories and learning style evaluations will help guide the teacher as lessons are prepared, and hands on activities will be used when possible. In the earlier elementary years especially, Montessori inspired activities will be created to match the TEKS which will allow the students to progress at their own level in math. In science, experiments and outside activities such as nature walks will enhance the students' natural curiosity. A humanities block will also be incorporated at all levels combining the study of language arts, social studies, art, music, and theatre giving the students a natural context for reading, writing, and history lessons.

Examine Information: At the logic level, students must learn what to do with information; they must learn to question the source of information and assess the validity of the information. The lost art of civil debate must also be taught so that students learn to back up opinions with fact. Critical thinking skills, the ability to synthesize, analyze, and evaluate, are crucial to the development of lifelong learners. In essence, the students must learn to think logically. Class discussions, Socratic seminars, debates, and the use of the scientific method applied to various disciplines will all be used to teach and develop these skills. As Martin Robinson says, "The teacher needs to bring in enquiry so that it becomes a part of the school ethos rather than just an add-on. The children need to grapple with knowledge that is rich, so that an atmosphere of curiosity and criticism is created" (p. 229-230).

Express Themselves: At the rhetoric stage, students learn to express themselves in a variety of formats. While most of today's students prefer to communicate electronically, we strongly believe that they must also learn to speak effectively to various audiences. In addition, they must be able to move beyond "textspeak" and learn to write fluently in a range of formats. These are skills that will set the students apart from their peers as they move into college and the workplace. Summative assessments will provide students the opportunity to use their communication skills to show what they have learned. We will challenge the students to explore ways to express themselves creatively through the fine arts as well.



Curriculum Design Process

We have talented, dedicated, and experienced curriculum writers creating a full curriculum for Trivium Academy. Their experience includes working with gifted, ESL, and special education students as well as regular education students. The curriculum is being built around the TEKS at all levels and tailor made for the students who enroll at Trivium Academy. The scope and sequence for humanities in 3rd, 7th, and 10th grade provides an example of the unique curriculum being created for Trivium Academy.

The curriculum writers are using the "backward design" approach modeled in Grant Wiggins and Jay McTighe's *Understanding by Design*. The backward design approach in its simplest form means that teachers should "begin with the end in mind"--- which also happens to be Steven Covey's second habit in *The 7 Habits of Highly Effective People*. According to Wiggins and McTighe, there are three stages to work through in order to plan backwards:

Stage 1: Identify Desired Results

The desired results form the basis of the scope and sequence and can be seen in the Essential Questions. Essential Questions are the learning objectives framed as questions. These are the questions we want students to be able to answer when the unit has been completed. The unit overview pages contain all of the necessary information for teachers to clearly see what their students need to be able to accomplish by the end of a unit.

Stage 2: Determine Acceptable Evidence of Learning

The evidence of learning will be determined by grade level teams. This will include the formative and summative assessments that will show that students are able to answer the Essential Questions. Examples of these common grade level assessments can be found in the sample scope and sequence.

Stage 3: Design Learning Experiences & Instruction

Teachers will be given the latitude to create the lessons that will best help the individual students in their classrooms reach the learning goals. As teachers plan their lessons they will use teaching strategies that are inspired by the most effective parts of different learning models such as Montessori inspired activities, project based learning, passion-driven classroom, and 21st Century learning. Our teachers will be given work days to plan these engaging lessons.



Special Learning Opportunities

There are many special learning opportunities that will be woven into the regular curriculum at Trivium Academy.

Morning Meeting: Our days will begin with a morning meeting that will get the day started on the right note. This is an opportunity to present character education material as well as provide time for school-wide recognitions. It will also be a great time to practice and present recitations and songs.

Genius Hour: One of the hallmarks of our special curriculum will be the Genius Hour. The concept behind Genius Hour (or 20% time as it is called in some places) comes from the corporate world where some companies such as Google allow their employees to use work time to pursue passion-driven projects. This idea has carried over into the education world where some schools allow their students time during the school week to research, create, and share projects of personal interest to them. Allowing choice and offering the students a chance to find their true passions can provide the motivation for students to attend school regularly and to stay in school.

Genius Hour will be built into the schedule for every grade level. This time during the week will look different at the various grade levels. In early elementary, it will take the shape of centers and purposeful play. As the students get older, their projects will increase in complexity. By the time they graduate, they will have had time to explore different options and to dig deep into subjects of interest. A final Genius Hour project will be a graduation requirement for our Trivium scholars. These powerful opportunities will help them to find the joy in learning which, as teachers, is our ultimate goal.

Book Club: The most effective method to encourage children to enjoy reading is to engage them in the Book Club method. The premise is simple; reading in groups not only encourages reading, but empowers students to find their voices while talking about books in a real-world setting. Book Club is incorporated in classrooms from first through twelfth grade all over the country and is endorsed by leading reading specialists, including Penny Kittle. Her book, *Book Love*, is a good guide for teachers to use so that reading in the classroom is an authentic experience. Trivium Academy will use Book Club at all levels so that students learn the power of reading and sharing what they learn with others. We encourage parents to join in the reading frenzy that is coming to a classroom near you very soon. Students love having outsiders included in the book club meetings because it is real-world and they feel responsible for knowing the book and engaging in conversation about their reading.



Special Learning Opportunities

Montessori Math: A Montessori math program provides students with concrete and engaging manipulatives to help students build a solid foundation in numeric functionality. By allowing students to see numbers as concrete and not abstract, they are able to understand how numbers work together with their own two hands. The materials are also fun and seem more like playing a game than doing math work. Anytime students can have fun while learning increases the amount of material that they are able to retain long term. Montessori math offers a sequential order for learning math concepts, each activity and lesson serving as a prerequisite for the next. Making sure that students have mastered one concept before layering on the next ensures that students have the fundamental building blocks to truly understand more difficult concepts later on. This individualized program is also a perfect fit for a differentiated classroom making it easy for teachers to provide remediation for students with skill gaps or to challenge more advanced students by allowing them to progress more quickly. At Trivium, there is still a place for textbook usage to cover math concepts that might not be covered through the Montessori math program. We will incorporate rote memorization of math facts as well, but there is no doubt that Montessori math is key in laying the foundation for students to truly understand and master mathematics.

Brain Breaks and Recess: We believe that students need frequent breaks in order to better attend to the task at hand. All elementary students will have a morning recess and an afternoon recess. In addition, teachers will be using a variety of brain breaks in the classroom throughout the day.

Community Garden: We see great connections that can be made with the curriculum in all of the cores subjects as we build a community garden. We also plan to include cooking skills when possible and would love to use the fresh produce from the garden.

Technology: Various forms of technology will be used in the classroom as tools that can help the students engage in learning, examine information, and express themselves. Technology will also play a vital role in students' Genius Hour projects.

Foreign Languages: Spanish (beginning in Kindergarten) and Latin (beginning in Third Grade) will be integrated into the Humanities block for the elementary students. Students who progress through the Trivium curriculum from kindergarten through sixth grade should have a strong foundation in Spanish conversation and comprehension skills by the end of elementary school and be ready to take their skills to the next step of mastery in middle and high school. While our Latin instruction is not designed to make the students fluent readers, speakers, or writers in this language, the study of Latin roots, prefixes, suffixes, and etymology enhances the students' ability to better understand the English language, as well as Latin based languages such as Spanish.



Special Learning Opportunities

Music, Art, and PE: While the elementary students will go through a Specials rotation of music, art, and PE every week, their classroom teachers will also be incorporating the fine arts and movement into daily lessons. The visual and performing arts are a rich cultural source from which to draw during the study of humanities.

Speech and Debate: As part of our commitment to teaching the trivium, speech and debate will be incorporated into the humanities block beginning in upper elementary. Giving the students the opportunity to become engaging presenters and thoughtful debaters will serve them well throughout life. It will also open the door to participate in extracurricular speech and debate tournaments locally, state-wide, or even nationally.

Celebrate Freedom Week: The Texas Education Code calls for each school to establish one full school week as Celebrate Freedom Week. During this week students are to receive grade level appropriate instruction over the Declaration of Independence and the U.S. Constitution, including the Bill of Rights, in their historical contexts. This week gives us an opportunity to celebrate United States history as a school-wide event. As part of this week, students in grades 3-12 are also required to study and recite the following text from the Declaration of Independence:

"We hold these Truths to be self-evident, that all Men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the Pursuit of Happiness--That to secure these Rights, Governments are instituted among Men, deriving their just Powers from the Consent of the Governed."

Classical Education: As part of a classical education, there are some key components in which students at Trivium will have the opportunity to engage:

- handwriting, phonics, spelling, grammar and vocabulary instruction within the context of the curriculum
- extensive instruction in Latin roots, prefixes, suffixes, and etymology providing students with a strong word sense
- memorization of facts through songs, chants, and more
- exposure to grade level appropriate classics with rich diction and syntax
- early exposure to the arts creating well rounded students
- curriculum instruction organized through historical time periods beginning in fourth grade, allowing children to truly understand the big picture by making connections across the curriculum
- reader's' theaters and simulations to make history come to life
- a solid academic foundation allowing students to think critically and form their own grounded opinions



<u>Kindergarten</u>

Humanities: "Play is the work of a child," according to Maria Montessori. At Trivium Academy, our kindergarten classes will have the opportunity to engage in learning through play. Songs and chants play an important role in engaging students in their learning at this age. For the Language Arts portion of the humanities block, students will learn a wide variety of reading and writing skills through a workshop setting because reading and writing should not be taught separately. During this workshop time, students will be exposed to different genres through guided reading, book clubs, and library lessons. As budding authors, students will learn how to write coherently with clear controlling ideas and sufficient details while implementing what they are learning from the books they are exposed to on a daily basis. Students will read and write daily to help them understand and examine the connection between reading and writing.

While the focus of social studies in kindergarten relies mainly on building a strong foundation in citizenship, geography, chronology, and examining the celebration of patriotic holidays and historical figures, at Trivium we will also integrate music and art studies into our humanities block through thematic planning. For example, students will express what they've learned by participating in reader's theaters and simulations to make history come to life. Our teachers will be able to work together to incorporate thematic units that connect all areas of content into authentic and engaging learning experiences for our kindergarten classes. They will have the opportunity to learn songs and the stories they tell, as well as study and practice the art from artist of the time periods they are currently studying. This provides a culturally rich curriculum where students learn to appreciate the arts at a young age.

Mathematics: In kindergarten math, it's important that students have a strong foundation in numeric functionality. By providing them with engaging and hands on manipulatives from Montessori math principles, students are able to see numbers as tactile instead of abstract. For example, when using number chains, students are able to master cardinal counting, skip counting, square roots, and cubing numbers. Not only does this provide a foundation for numeric functionality, but also geometrical equations. In conjunction with the Texas Essential Knowledge and Skills, the Montessori math program used at Trivium allows teachers to differentiate the classroom instruction by meeting students at their current level and moving them forward one building block at a time. Activities such as a class store will give students an authentic learning experiences to express themselves through pretend play by assuming various roles while making real life connections to their learning.



Science: In kindergarten science, the majority of instruction is conducted through engaging indoor and outdoor investigations allowing students to describe and examine the natural world using their five senses. Students are able to develop their academic vocabulary naturally through authentic and fun learning experiences. Scientific investigations will revolve around these themes: matter and energy; force, motion and energy; earth and space; and organisms and environment. Students will learn to examine information by asking questions, express themselves by communicating their ideas and explore using scientific tools. Inquiry is at the heart of our science curriculum driving students to learn through natural curiosity. Our outdoor community garden and green spaces will enrich student's science experience. Our students will understand the connection between citizenship and our responsibility to the Earth by participating in a school wide, cross-curricular Earth day celebration. Science fair and Rube Goldberg week will also be school wide activities where all students are able to put their knowledge into practice with teacher guidance.

First Grade

Humanities: First grade is full of firsts for our students as they learn how to be students for the first time. While there will still be plenty of fun and engagement through play, they will learn to see themselves as emerging students. English Language Arts will focus on reading, spelling, penmanship, and listening and speaking. Using Penny Kittle's Book Love, we will focus on books of all kinds and allow students to engage in their reading by finding their own choices in reading. While the teachers will also be incorporating classical texts in the classroom, students will begin book stacking (keeping lists of everything they read and the total page count). This is a motivator for them to keep reading and finding new interests as they progress. Writing will also be an added component, so they can read, respond, and express their ideas. Book clubs and writing groups will allow students to present what they know to others and enrich the classroom experience also. They will also begin learning to spell, having a new list each week taken from what they are actually reading, so they can see realworld connections. Using the Social Studies TEKS, we will focus on allowing students to find their relationships to the classroom, school, and community to establish the foundation for responsible citizenship in society. We will focus our humanities instruction on good citizenship, family customs and traditions, problem solving, decision-making, and independent thinking skills. Each unit of study will focus on a theme incorporating high-level interest for the students and the ability to begin examining the information they are learning.



Math: We will use a combination of Montessori Math incorporating the engaging and hands-on approach to learning, and the TEKS specific to first grade. Students will learn to understand and apply place value, solve problems incorporating addition and subtraction, composing and decomposing two-dimensional shapes and three-dimensional solids. We will also use real world examples, such as our herb garden business so they can see how we make and budget money. We want math to be fun and engaging so children have a chance to see how numbers really work in their world, even at a young age. We will begin with the basics and move them forward throughout the year in sophistication and understanding as they begin examining information and learning to express their findings. Because the manipulatives make learning fun, they will see math as a fun subject at Trivium and beyond.

Science: Science, as defined by the National Academy of Science, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through the process." First grade is a chance for our students to engage, explore, and discover, using all types of mediums to allow them to test, examine, and express their findings to their class. Investigations can include patterns, cycles, systems, models, and change and constancy. We will have the garden, butterfly garden, and various pets around campus to allow them to observe science in the real world. They will learn how food and flowers grow, animal eating patterns, science experiments for observation, and how the natural world affects all of us. Our hope is that our students learn quickly that learning engages us in our natural world in a fun way. Our students will understand the connection between citizenship and our responsibility to the Earth by participating in a school wide, cross-curricular Earth day celebration. Science fair and Rube Goldberg week will also be school wide activities where all students are able to put their knowledge into practice with teacher guidance.

Second Grade

Humanities: Because second graders have already learned many reading and writing skills and understand the value of reading and writing, they will be able to extend their learning and focus on their part in the world. They will continue fine tuning and building on the skills they acquired in 1st grade. Reading and writing will again be the keystone, but in this grade level we will be able to use our local resources to bring added enrichment and engagement into the classroom. There are several local authors and other community members to help us bring the outside world into our school. Students will engage in reading short and long text in all genres including: poetry, founding documents, fiction, non-fiction, biographies, and songs. These pieces will allow student rich models from which they can center their own writing. Continued instruction in spelling, grammar, comprehension, and phonemic awareness will move



students forward in their learning. Researching and examining information will incorporate both English and social studies.

Social studies will focus on the local communities, significant individuals and historical event that shape the community, state and our nation. Second grade focuses on the community and this will give us the opportunity for our students to feel a part of where they live. They will learn to contribute to their communities and our school as well. Students will be able to find something small they can do to begin changing the world. Our garden will help students learn firsthand how money is made and students will have the opportunity to decide how money is saved for a specific purpose. They will be able to study the free enterprise system first hand in a fun and innovative way. We will study Thurgood Marshall, Irma Rangel, John Hancock, and Theodore Roosevelt. They will study maps and globes and be able to make maps of their own. Students will begin to develop concepts of time and chronology through use of timelines. We will learn to be good citizens of our school, community, state and nation as we express what we've learned by putting knowledge into practice. Field trips, reader's theaters, and simulations utilizing costumes and theatrical elements will allow students to see history come to life before their very eyes.

Math: As in all Texas standards, the driving force is to make sure students are college ready when they finish high school. This starts as early as second grade when students study making comparisons with the base-10 place value system, solving problems with addition and subtraction within 1,000 and building foundations for multiplication. While Montessori math builds on the strong foundation of seeing numbers as concrete, rote memorization of math facts still plays a valuable role in our math program as well. The engaging math manipulatives move students forward at their own pace and empower them to see how math works in their own way. Through thematic, cross-curricular units of study, students will have real-world experiences to apply to mathematics.

Science: In 2nd grade, careful observation and investigations are used to engage in learning about the natural world and reveal patterns, changes and cycles. Student should understand that certain types of questions can be answered by looking at something a little more closely and that the information gathered may change as new observations are made. Science will be taught with a hands-on approach and students will learn to explore and express their documented scientific findings in different ways. Students will be able to continue the study of our community finding all types of researchable topics, from the garden, animals, weather, and topography. For example, students will be able to see which herbs grow the fastest and research why. Careful planning of thematic units will help incorporate all of the core subjects, allowing students to put all the pieces together for an enriching learning experience. Our



students will understand the connection between citizenship and our responsibility to the Earth by participating in a school wide, cross-curricular Earth day celebration. Science fair and Rube Goldberg week will also be school wide activities where all students are able to put their knowledge into practice with teacher guidance.

Third Grade

Humanities: In 3rd grade humanities, students will engage in the opportunity to examine interesting texts and genres such as: informational, fiction, biographies, poetry, founding documents, song lyrics, and more. Through the reading/writing workshop format, teachers will select quality texts with rich style and diction to support the historical time periods being studied. In 3rd grade, we introduce the study of Latin roots, prefixes and suffixes, helping students build a strong foundation in language and decoding skills. Students will also select their own texts based on the genre currently being studied to read and express their ideas in a book club format. Students will learn to listen, read, write and communicate their ideas effectively.

Students will write in a variety of genres such as: narrative, expository, persuasive and poetry. As young authors, students will be empowered to learn to use their voices in their writing by practicing skills such as: organizing ideas, identifying controlling ideas, and providing strong supporting details. Students will begin to engage in revising and editing strategies through teacher conferencing. Skills such as handwriting, spelling, grammar and vocabulary development play a large role in the reading/writing workshop as students learn the effect this skills have on the writing process. Using Jeff Anderson's approach from his book, *Mechanically Inclined*, students will analyze how real life authors also rely on these valuable skills to enhance their own writing. By providing students with authentic learning experiences, they will be able to see the value of the skills they are learning in everyday life.

For the social studies portion of the humanities block, students will study the contributions that scientists, mathematicians, inventors, authors and artists have made to society though cross-curricular, thematic units. Students will continue to broaden their understanding of the role of free enterprise in our community by interviewing real community members. We will continue to build a strong foundation in: geography, economics, citizenship, and cultural appreciation.. Students will participate in the learning hero's journey through both fiction and non-fiction characters. Field trips, reader's theaters, and simulations utilizing costumes and theatrical elements will allow students to see history come to life before their very eyes.



Math: In 3rd grade, students will become fluent in mathematics by building a foundation in facts with a strong number sense. At this age, some math concepts are able to be moved from concrete to abstract, and building on the foundation from Montessori instruction in K-2, many students are developmentally ready to do this. In 3rd grade, students will learn that true problem solving takes time, effort, and perseverance. Students must learn to embrace mistakes as part of the learning process-important skills that transfer into other areas of academia and life.

There are three primary focal areas in math for 3rd grade: place value, operations of whole numbers, and fractional units. Students will have the opportunity to use a variety of tools and engaging manipulatives when solving problems. Tools such as number chains, numerical rods, beaded cubes, geometric shapes, number and decimal cards, and fractional cut outs are all part of the Montessori approach. As students examine numbers more closely, they move into the abstract. Techniques such as mental math, generalizations, abstractions and estimations will also aid in problem solving. Students will learn to express their ideas in mathematics using symbols, diagrams, graphs, and language.

Science: Building on a curriculum foundation in *Inquiry by Design*, teachers will engage students through natural curiosity while facilitating indoor and outdoor scientific investigations and experiments. Using a project based instructional format, students will examine physical characteristics of matter and learn how changes can occur. Student will study the relationship between the Earth, moon, and sun using models, telescopes, and experiments in our outdoor garden. Students will learn about the environment's role in survival by examining thriving environments, perishing environments, and illnesses. As students begin studying Latin roots in their humanities class, they will begin to see a connection in scientific vocabulary. Our students will understand the connection between citizenship and our responsibility to the Earth by participating in a school wide, cross-curricular Earth day celebration. Science fair and Rube Goldberg week will also be school wide activities where all students are able to express themselves by putting their knowledge into practice.

Fourth Grade

Humanities: Fourth grade teachers will work closely to develop engaging units of study that reinforce each other throughout the day. This will provide a cohesive and rich learning environment. The English Language Arts portion encompasses a wide genre of engaging literary and informational texts; writing, where students compose a variety of written texts with a clear controlling idea, coherent organization, and sufficient detail; research, where students are expected to know how to locate resources



and examine them critically, and express ideas and information through presentation. Continuing with our reading writing workshop and book club format students will continue to develop their communication skills by listening and responding to the ideas of others while contributing their own ideas in conversations and in groups. The study of Latin roots, prefixes, and suffixes will build a solid foundation in vocabulary and language usage. Students will continue their study of grammar through context while adding a focus on style and diction. Skills such as handwriting, spelling, grammar and vocabulary development still play a role in the reading/writing workshop as students learn the effect these skills have on the writing process. Using Jeff Anderson's approach from his book, *Mechanically Inclined*, students will analyze how real life authors also rely on these valuable skills to enhance their own writing. These skills are cumulative and throughout elementary, students will work on varying levels and sophistication each year.

The social studies focus is Texas history from the early beginnings to the present within the context of influences of North America. Using Texas history as the backdrop, units will incorporate all the TEKS from ELA, social studies, music, theater, and art. For example, the study units will include the four basic strands of art: foundations, observation and perception, creative expression, and historical and cultural relevance. Students will truly understand the state in which we have the opportunity to live by engaging in texts born out of Texas, examining Texas architecture and art, listening to music native to our state both new and old, and understand the individuals and cultures that have influenced and formed the Texas we live in today. We have several Texas authors living in the area who can provide a very special reading day for our students to learn from the masters. Students will have the opportunity to celebrate Texas with activities such as a chili cook-off, art show, and campfire read-around. Field trips, reader's theaters, and simulations utilizing costumes and theatrical elements will allow students to see Texas history come to life before their very eyes.

Mathematics: Building on skills students have already mastered, Trivium will focus the study math on ensuring that students are problem solvers and can use math effectively and efficiently in daily life. Students will use problem-solving models that incorporate analyzing information, formulating strategies, determining solutions, justifying the solution, and then examine the entire process with a critical eye. Students will use real objects, engaging manipulatives, algorithms, paper and pencil and various types of technology throughout the year to help them master mathematic concepts. We will be using Montessori methods, but also focusing on best practice for our students. At this inquisitive age, when children are able to see math through real objects in the real world, they enjoy the study of mathematics much more. Math manipulatives continue to be available at all ages and levels, however the students are able to choose when they



move from concrete to abstract. Engaging in the community garden and (hopefully) fresh egg production, our students will be able to see real commerce take place at school by setting up business plans and seeing them through. Each grade level will participate in the "business" at varying levels.

Science: Science and math will develop cross-curricular, engaging, thematic units so students can incorporate what they learn in various areas of school. Fourth grade examines the natural world. Using methods, models, and conclusions, students will understand how the natural world works. For example, we will study renewable sources and nonrenewable sources, and our responsibility to take care of our Earth. Students will be able to participate in an environmental group who recycles both inside the school and out. They will also have the opportunity to study the life systems of various animals since we expect to have various animals placed around the school for observation. Science will use a hands on approach to learning founded in inquiry and like everything else can also be incorporated in other aspects of learning in the fourth grade. Our students will understand the connection between citizenship and our responsibility to the Earth by participating in a school wide, cross-curricular Earth day celebration. Science fair and Rube Goldberg week will also be school wide activities where all students are able to put their knowledge into practice with more independence this year.

Fifth Grade

Humanities: In 5th grade, our students are becoming more independent in the reading/writing workshop, as they are able to select writing topics based on the genres being studied and engage in writing conferences with their peers and teachers. Implementing effective writing strategies and lessons from master teacher, Gretchen Bernabei, students will gain confidence with their ability to express themselves through their writing skills. Examining engaging texts selected by the teacher will guarantee that students continue to gain exposure to literature with strong diction and style, while students will still participate in reading book club novels of their choice. Students will be given reading challenges each week to search for and incorporate various literary devices and elements into their own writing, so that they learn to read like writers. The study of Latin roots, prefixes, suffixes and etymology continues to build a solid foundation in cross-curricular vocabulary and language. Many of these language arts skills are cumulative throughout elementary school and students are expected to work on varying levels of sophistication as they master new skills each year.

With the history of America as a backdrop, students will learn the history of our country from the Revolutionary War to the 21st Century. Students will study American



authors of novels and short stories that support historical movements. Our humanities block incorporates all the TEKS from ELA, social studies, music, theater, and art, so students are able to learn about artists, composers, authors and other significant figures and examine their influence on our culture and society. Allowing students to connect their knowledge to real life helps them see the value in learning, for example, with the Presidential election happening in November, this will provide a rich environment that will allow for students to hold a mock election. Field trips, reader's theaters, and simulations utilizing costumes and theatrical elements will allow students to see Texas history come to life before their very eyes.

Mathematics: The main focus areas in 5th grade are solving problems using addition, subtraction, multiplication, and division with positive rational numbers, determining and creating formulas and solutions to expressions, and growing their concept of measurement to include area and volume. This will include algebraic reasoning, geometry and measurement, and data analysis. We will continue an engaging approach to math using many of the Montessori models. Manipulatives such as the decimal boards, squaring and cubing materials, and fraction models continue to help students see their math work as concrete. Students have the capability to decide when they are ready to move from concrete to abstract work. We will continue to allow authenticity to drive students' in their learning. For example, our students will write their own story problems about their lives to allow them to truly internalize what they are learning. Encouraging students to connect mathematics to their own lives continues to help them enjoy math in an authentic way.

Science: Science and math will develop engaging thematic units so students can incorporate what they learn in various areas of school. Grade five continues the study of natural world. Using methods, models, and conclusions, students will understand and examine how the natural world works. To truly engage our students in science instruction, teachers will facilitate classroom and outdoor investigations for the majority of the instructional time. Our outside facilities will easily allow us to use the garden, land, and the creek for scientific experiments. Because all of our units of study will be integrated, we will develop many of the units around a piece of literature and US history and extend these learning opportunities to science and math as well. Students will be able to keep records on weather, including rain amounts and productivity of the garden. This should all be an organic way to study real world situations rather than constantly relying solely on textbook material. Our students will understand the connection between citizenship and our responsibility to the Earth by taking an active role in a school wide, cross-curricular Earth day celebration. Science fair and Rube Goldberg week will also be school wide activities where all students are able to put their knowledge into practice independently.



Sixth Grade

Humanities: As 6th graders, our students will continue growing as independent readers and writers through the workshop format. Students will select many of their own writing topics and become fluent writers in genres such as: poetry, narrative, expository and persuasive texts. Students will broaden their horizons through examination of classic literature selected by teachers. They will also continue to engage in the reading process by selecting their own book club novels based on the current genre being studied. Students will express their ideas through a variety of formats, such as Big Idea Notebooks, a concept where students connect thematic ideas from various texts and situations from Penny Kittle's *Book Love*. We will continue fostering a love of grammar, diction, and style through the use of mentor texts, a concept introduced by mater teacher, Ralph Fletcher. The study of Latin roots, prefixes, suffixes and etymology continues build a solid foundation in vocabulary and language. Our goal continues to be an authentic approach to instruction through context, not isolation.

Through world history studies, students will have the opportunity to learn and embrace a viewpoint of our global society and understand that we are one world with similarities and differences influenced by our geography, historical figures, and access to technological innovations. Students will learn about institutions common to all societies such as government, religion, and education, and compare and contrast characteristics to our own society. With history as their framework, students are able to make connections through all content areas. Field trips, simulations, art projects, music studies, and reader's theaters are all engaging activities that help our students see and appreciate their world in a new way, like observing life through a magnifying glass.

Math: As students advance in learning more complex math concepts, they are able to do so successfully from the strong foundation the Montessori math program has offered them. Through concrete manipulatives and rote memorization of math facts, most students are utilizing Montessori manipulatives to learn a new concept, but can move quickly to abstraction when needed. If any gaps are present for our students, the math program at Trivium will allow for remediation opportunities to get students where they need to be. Mastering math concepts has layers of prerequisites; if there is a missing piece, the tower is not solid. The primary focus of 6th grade math revolves around number and operations, proportionality, expression, equations, relationships and measurement and data analysis. Helping students continue to see the real life connections to math, we will incorporate cross-curricular, thematic units. For example, if we have a mock election, these students will be able to establish tables so that numbers can easily be analyzed. They can also learn to balance a budget and create a business plan. Authentic instruction is key to keeping students engaged in their learning process.



Science: In 6th grade science, students will continue to connect ideas through all areas of learning though cross-curricular, thematic units of study. Latin roots will continue to aid in students' understanding of scientific academic vocabulary. Connecting content across all domains helps students view their learning experience as authentic and valuable. The majority of classroom time will be used for project-based investigations, which can be done both indoors and outdoors. Our outside green areas, community garden and backyard creek will serve as a backdrop for scientific investigations. Although the foundations of science are taught through building blocks of knowledge and skills with recurring themes, much of 6th grade focuses on physical science. The strands students will focus on are: scientific investigations, matter and energy, force motion and energy, Earth and space, and organisms and environments. As the oldest students in the school, our 6th graders will lead by example by showing younger students the connection between citizenship and our responsibility to the Earth all year long. Science fair and Rube Goldberg week will also be school wide activities where all students are able to put their knowledge into practice and show off what they've learned independently.