



CTL CORNER

Center for Teaching & Learning | 10431 Hufsmith Rd., Tomball, TX 77375 | 832-474-8214



Important Dates

December 18 - Polar Express Day, Holiday Treasure Shoppe, Holiday Parties

December 21 through January 4 - Winter Break

January 4 - Staff Workday

January 5 - Students Return

January 18 - Dr. Martin Luther King, Jr. Day - No School

Important Reminders

* Have a wonderful holiday break! Stay safe and well!



The Most Wonderful Time of the Year

What an exciting and interesting year full of anticipation, wonder, discovery, excitement, learning opportunities and blessings. Lots of mixed emotions have tested our persistence to carry on in the midst of adversity, but our wonderful team of teachers, students and parents with our positivity pulled through together. In spite of temporary changes to many of our traditions we hold dear—family gatherings, daily school-wide morning meetings, cross-grade-level reading buddies and clubs and recess—we have had a great beginning to the school year. It is hard to believe we are already halfway through.

Since our September *CTL Corner* newsletter, October and November brought us beautiful weather and fun festivities as we celebrated Halloween, Thanksgiving and the culmination of the first trimester with portfolios and student-led conferences. And now it is already December with the first cold weather and a spirit of joy permeating the air as we get ready for the *most wonderful time of the year*.



At CTL we practice a tradition of focusing on the positive beginning each day in our morning meeting. We have learned this year to be thankful for masks, hand sanitizer, social distancing, and CDC guidelines that have helped keep us safe—and for students, teachers and parents who have so faithfully followed those guidelines. We are now incredibly thankful for a vaccine that has been developed in *warp speed* and vaccinations that have begun in record time. We are confident that we will resume all our traditions soon, joining together again as a CTL family. We are looking forward to the new year and beyond!

We wish each of you a happy holiday season and the beginning of an exciting 2021!

Linda Ellis





Pre-K Class

What a fun and busy October for the Pre-K class. During reading workshop we are discussing parts of a book and how the author and illustrator are sometimes different people and how they must work together to make the book come alive. Also, that the front cover design can give you clues to what the book is about. Some of our favorite books are *Room on a Broom*, *Scarecrow Boy*, *Pumpkin Hill*, *The Very Busy Spider*, *Stellaluna*, *Little Blue Truck's Halloween* and *Turkey Trouble*.

Students love writing their own books and proudly share them in the author's chair each day. We also love giving positive feedback to each other.

Science workshop for this month included a couple of STEAM challenges. After reading *Five Pumpkins on a Fence*, the Pre-K students had to build a structure to hold five pumpkins. We also completed a teddy bear bridge challenge where they had to construct a bridge to get the teddy bears over the water. One of their favorite activities for the month was the bubbly witch's brew they created in their cauldron.



We had a couple of special activities this month. We enjoyed a teddy bear picnic with our friends which included some yummy snacks followed by award necklaces for our teddy bears. Ending the month with our Halloween celebrations that included dressing up in our favorite costume and receiving a candy treat bag.x-

We explored shapes in or math workshop through art. Wassily Kandinsky and his circles, Piet Mondrian and his primary colors, squares, and rectangles, and triangles through Pablo Picasso's cubism.



November went by quickly as Pre-K put together their portfolios and reflected on our fun classroom activities so far this year. Part of our social studies was learning about the Pilgrims and their voyage to America. We made butter like they did long ago and enjoyed it on a roll for a morning snack. Pre-K and the Kindergarten class shared a special Chick-fil-A Thanksgiving lunch together. They looked so cute dressed up as Pilgrims and Native American Indians.

For December we are looking forward to our holiday celebration in the classroom.



Beckey Billings *Kindergarten Class*

Kindergarten is having so much fun learning that Trimester 1 has flown by. They are happy to be at school each day, and it shows in their excitement. They continue to amaze me each week with the growth they are making. I look forward to seeing them grow even more over this next trimester.

In reading workshop we love to hear stories read aloud. We discuss characters, setting and even problems and solutions in our stories. We are becoming fluent readers and love to choose our own books from a set of leveled readers. We enjoy reading in our comfy spots, and we love to share our books with a buddy. We are always anxious to get new books to read and bring home.

In writing workshop we are starting to write longer stories by adding more details. We really love to write about our personal experiences. Our favorite thing to do is share the stories we write in the Author's Chair. It is so much fun to ask our peers what they hear and like about our stories.

In math workshop we have been developing strategies for composing and decomposing numbers. We love to do mental math and learn new ways of solving equations. We use a variety of math manipulatives to solve problems and play math games. We learned how to group by 5's and 10's. We look forward to solving addition and subtraction within 20 in the month of December.

In science workshop we finished our scope about weather and various weather conditions. We learned about different tools used to measure the weather, and we even made our own windmill. We had a lot of fun learning about what a meteorologist does, and we even performed our own weather report. We will finish December talking about energy from the sun. We will be making observations to determine the effect of sunlight on the earth's surface.

In social studies workshop we learned the pledges to the United States and Texas flags. We even had our own voting booth and voted for our favorite cookie. We had much fun during Halloween celebration and pumpkin investigation. We learned about the Native Americans and pilgrims and we even had our own feast.

We are excited about the holiday season upon us and look forward to celebrating in December.

Gina Brown





1-2 Class

Our class has been busy the last two months. We definitely explored to our hearts content. We are having fun with our adventures brought to us by Holly and Jolly, our elves, and we can't wait for our *Polar Express*/PJ day!

Reading workshop continued with our usual classroom expectations, and the kids were reminded to exchange books in their book bags each day. Reading daily is one of the most important habits for your child's development. The growth is tremendous when they follow this ritual. I am noticing improvement from every student in reading. Congratulations to all!

Writing workshop continues to display the growth in writing as well. I have seen each student use what they are learning in our mini lessons as well as in the stories read in read aloud in their own pieces of writing. The focus was to remember to use periods for full stops and question marks, exclamation points and capitals where needed. There has been much improvement. All of the kids are enthusiastic to share their pieces and receive feedback from their peers. I will continue to model my writing for the class in our mini lessons.

During math workshop we were able to incorporate fun math games. We continue to build our math facts in addition and subtraction. Our number talks are a great way to show thinking and explain what we know. The class has been working to find place value and compare up to three and four digit numbers. Moving forward we will be looking at fractions, money and time. The class will continue with many hands-on activities to explore math.

Science labs were focused on the caring and protection of the young as we studied animals. We completed labs to explore the parts of animals and the ways they use their senses to survive. They had fun with this lesson. We looked at physical traits and heredity. We also continued our STEM activities to keep our engineering piece going and a variety of experiments. In December we will be moving on to study patterns in the sky. We will be looking at stars, the moon and the sun and how they relate to each other.

Social studies was fun as we explored the many ways we use a map. We were able to locate major cities in Texas, our surrounding states and where Texas is on a larger map. The class also researched the first Thanksgiving and how traditions were started. We looked at the very first feast and the activities surrounding it. We will move on to study holidays around the world and "visit" different countries to see how they celebrate in December.

On a side note, we did experience some sad news with the passing of our class pet gerbil, Snowflake. The kids held a small memorial



for him with a white balloon release in his memory. They each wrote a special note to him and attached it to their balloon. I would like to say thank you to Cecy Monnier-Cortes for sending the balloons to our class. It was greatly appreciated and very thoughtful!

Thank you for your support in your child's educational journey. It is so important and it truly shows!

Lisa Lipar

3-4 Class

Third and fourth graders are amazing learners! We enjoy discovering new things each day. As we move into the second trimester, we will continue to explore new topics in each subject area.

In reading workshop students are charting their reading progress and documenting books they have completed. We have so many avid readers! Students are encouraged to think about the story elements as they read. This includes the setting, characters, problem and solution of the story. We will begin to discuss character traits within their selected texts and explore how this adds to the plot. The students are enjoying the many options for book projects. This goes hand in hand with writing workshop. We have so many incredible writers, and I can't wait to watch and guide them as they continue to grow. They have been immersed in personal narrative writing. We will be analyzing our writing to select pieces to publish. During this process students will edit and revise some writing for publication.

In math workshop students will continue learning and understanding multiplication and division. We explore these math concepts in many ways. They utilize math skills to solve real-world problems and share different ways to get the same answer. They also practice specific multiplication facts through math games created for each multiplication fact. We will continue to discover how, like addition and subtraction, multiplication and division work together with related facts. This concept opens up the knowledge that if you know one fact you can use it to solve other facts. Our mathematicians have fun learning more about the connections in math and numbers.

In science workshop we will move into a new topic, how organisms change over time. Within this unit we will explore plant and animal extinction, fossils and survival of the fittest. We will complete each topic through project-based learning and group presentations.

During social studies workshop our focus will continue to be on the colonization of Texas and the Texas Revolution. We will learn about the important people in Texas history with a wax museum showcase.

I am amazed daily at the brilliance and uniqueness of each student. As always my main goal is for each student in my class to LOVE learning and continue as lifelong learners throughout their lives. Thank you for sharing your child with me each day!



Melanie Welsh

5-8 Reading-Writing Workshop

What a wonderful first trimester we had! To recap, in addition to our daily independent reading time where we get lost in our choice books, we finished reading our class read aloud book *Fish in a Tree* by Lynda Mullaly Hunt. The students loved relating to the main character, Ally. Students remained highly engaged with the story, enjoying discussions about confidence and self worth. Changing things up a bit, we have now begun our second class read aloud, Bluebonnet Book Award Winner, *Greystone Secrets: The Strangers* by Margaret Peterson Haddix, a suspenseful, masterfully-plotted mystery. Our eager readers have had so much fun trying to figure out what happens next. This book is certainly providing us with tons to talk about and mull over.

We presented our first round of book projects, and I was delighted by the quality and variety of the presentations given by everyone. We had everything from trifolds to animations. As well as practicing their presentation skills, book projects also help to foster a classroom full of young people who just love reading books and sharing them with their friends. I noticed several students already picking up books their friends had recommended in their book projects.

In the writing workshop students completed their first round of writing, and we all enjoyed our first Publishing Day together. This involved the students making several revisions to their pieces of writing before proofreading and editing them. Then their pieces were finally ready to share with their peers. Publishing Day is always an exciting day, and the students have truly enjoyed the opportunity to share their writing with others in a meaningful way.

We then dove into figurative language, looking at examples from song lyrics, then applied it to our own writing. The students had so much fun identifying the examples. Everyone has begun their second and third pieces of writing, having fun with the writing process. I've seen a wide range of writing this time around, from memoirs to short stories, ghost stories, song lyrics, poems, and humorous pieces.

We are looking forward to our next Publishing Day coming up soon, as students feel the benefits of sharing their writing with their peers and receive lots of positive feedback.

Kristy Moreno

5-8 Math Workshop

In October, the 5th & 6th graders wrapped up the Numbers Foundation Unit 1 with the distributive property and the order



of operations. Students learned how to apply the distributive property to rewrite numbers, for multi-digit multiplication and to simplify algebraic expressions. The order of operations was introduced and expanded to include exponents which we learned about in September when we rewrote prime factorizations with exponents. We used the PEMDAS acronym to help remember the order in which operations must be completed in problems with multiple operations. We practiced simplifying numeric expressions, finding mistakes in other people's work on these complex problems and creating our own order of operations problems for classmates to solve.

On Halloween we used prime factorization and the greatest common factor to figure out how many treat bags we could make given specific candy amounts (thanks again CTL parents for donating and making candy treat bags!). The entire school also made guesses on the number of pieces of candy in a large and small jar and the students who guessed the closest numbers won the entire jar of candy! Russell (1st grade) won the large jar and William (6th grade) and Ezra (8th grade) tied for the small jar so they flipped a coin to see who would get the candy jar. Ezra won the coin toss! Both William and Ezra used a specific math estimation strategy to guess the amount of candy in the jar.

We then began the Proportional Reasoning Unit where we are focusing on interpreting different forms of rational numbers (fractions, decimals, percentages) and learning when each form is most appropriate for a given problem. The first investigation we examined involved comparing fundraisers for 6th grade, 7th grade, 8th grade and teachers. Each fundraiser had a different goal amount, and their progress was measured on a "thermometer"-type bar scale. Before Thanksgiving break, we explored how to find fractional amounts of the fundraiser's progress by creating fraction strips from folding strips of paper into equal parts. Students had great discussions about how to fold the paper strips to create halves, thirds, fourths, fifths, sixths, eighths, tenths and twelfths fraction strips. Equivalent fractions naturally evolved from these discussions as we put these fractions on number lines and compared distances between fractions less than 1. In December we continued to use these student-made fraction strips in later parts of the investigation as they began to compare quantities using ratios and finding equivalent ratios using multiplicative patterns. We compared the final money amounts raised by each fundraiser by writing comparison statements using ratios.

We concluded the first trimester with self-evaluations as we reflected on all we had accomplished this first third of the year.



Students diligently worked to prepare their work during portfolio workshop and practice for their student-led conferences. This was a new experience for both myself and some of our students who are new at CTL. I learned a lot about them, and I know they learned a lot about themselves through this reflective learning process which is a unique opportunity provided at CTL. We are all learning and growing together and have had a great start to the second trimester. Please make sure your student replenishes their supplies as needed, and feel free to reach out to me with any questions or concerns via Remind Direct Message (Remind App - Class code @56mathctl) or by email.

In October, the 7th & 8th graders completed the large Gaga Pit project with the help of Dr. Morris and Mr. Schimmel. This real-life application of polygon sides and angles was a great experience for everyone, and all the upper school students have been enjoying playing gaga ball at snack and recess every day since!

Also in October, students continued their study of angle relationships using complementary and supplementary angles. Initially, students were finding missing angles when the other angles were given as numbers then expressions were introduced requiring students to write an equation based on the angle relationship. We reviewed one-step equations as well as simplifying algebraic expressions by combining like terms. Then we learned how to solve two-step equations using these complementary and supplementary angle relationships. We returned to triangle angle relationships to solve much more complex problems where all three angles were given as expressions. These complex triangle angle problems were the most challenging topics covered to date, and I was so proud to see how they persevered through them and combined all the skills and concepts previously learned to solve these problems.

In November, we then began studying the angle pair relationships created by any two intersecting lines and then parallel lines cut by a transversal. Students must first identify the angle relationship and determine if the angles would be congruent or supplementary. These problems evolved from numbers-only into expressions-only problems where students had to write and solve a one- or two-step equation to find the variable then determine the missing angle. Students are gaining confidence with writing and solving equations with every new topic to which we apply this algebraic thinking. Students were challenged to write and solve equations with variables on both sides in both angle pairs and parallel lines angle relationships.



In December we are just beginning our investigation into the side length requirements of triangles. Students discovered this relationship by making varying side lengths using markers and seeing which side lengths made a triangle and which did not make a triangle. This rule will lead us into reviewing inequalities as we formalize the Triangle Side Inequality Theorem.

When we return from holiday break in 2021, we will focus on right triangles and introduce the pythagorean theorem. Please make sure your student has a graphing calculator to bring to class each day and replenish supplies as needed. Please feel free to reach out to me with any questions or concerns via Remind Direct Message (Remind App - Class code @78mathct1) or by email.

Rachelle Petrovic

5-8 Science Workshop

In Grades 5-6 science, we moved on to matter and its interactions by focusing on valence electrons, ions, elements and the periodic table by creating element posters and atom/valence electron headbands. These were crazy-looking, unique, and enjoyable for everyone. Using stations, students explored and reviewed chemical and physical properties, and various experiments helped us learn about chemical reactions, compounds, and the Law of Conservation of Mass.

With a pause for portfolio and preparation for student- led conferences, students worked on their extended learning project and incorporated the science involved with their chosen topic. They shared information about animation, astronomy, aliens, computers, the lifecycle of a fruit and much more through presentations, models, animations, and drawings.

After our break, we came back to learn about mixtures, solubility, and saturation with some fun experiments comparing the solubility and saturation of salt and sugar. We also explored how temperature affects these things.

In December we are learning about pH and the pH scale with videos, activities, and experiments galore such as identifying solutions with indicators and determining the best pH to dye eggs (helpful next Easter). We will wrap up our unit on Matter and its Interactions with a culminating experiment where they apply all they know from class this year. Be on the lookout for some silly putty fun!

Grades 7-8 science has been busy these last few months. We explored heat transfer, density, and the layers of the Earth with experiments, activities, and models that were unique and fun.



They recreated early layers with a messy, layered candy model that students named our “unicorn model.” They then created posters and clay models to explain plate tectonics and plate boundaries which led to learning about the seismic waves that plate movements cause. Simulating seismic waves with ourselves and things like rocks, ping pong balls and foam cut outs was the best way to make these things visual. This in turn led us to recognize the risk of some areas to earthquakes and volcanoes just by where they are located on Earth. Students researched cities and countries near plate boundaries to see if they had more earthquakes and volcanoes than areas not on plate boundaries. This was proven to be true, and they created posters telling their classmates about the earthquakes and volcanoes for the city and country they focused on and the devastating effects these can have on the cities and people in those communities.

We reflected on what we had learned so far with our portfolios and student-led conferences, and then we jumped back into more learning by going into depth on earthquakes through videos and reading to create a foldable full of new information.

In December we will continue learning about earthquakes and how they are monitored and predicted as well as learning more about volcanoes with in-depth reading, experiments and games.

Amy Kiddy

5-8 Social Studies Workshop

In Grades 5-6 social studies we have been busy. We learned about the neolithic revolution and the birth of civilizations. We explored what was needed for a civilization to be prosperous by creating our own mini civilizations and debating which would be better with an expert panel and an essay outlining each group’s plan which included things such as the type of government, life and culture, military and defense, food supplies, trading and economy, and much more.

After that activity the students worked diligently reflecting on their trimester and creating and co-authoring portfolios to share with their parents. When they completed their individual portfolios, the students worked on a project and presentation of their own design and planning called extended learning. They chose their own topic related to social studies and researched it. After researching their chosen topic, they designed a method of sharing what they had learned with their classmates. They shared so many exciting and interesting things during this process.

Once back at school after the well-deserved Thanksgiving break, the students dived back into their work by exploring



emerging civilizations further with a timeline and map showing the civilizations that existed during the ancient era of 3500 BCE to 500 AD. This gave the students not only a wonderful visual of the civilizations around the world during this time period but also when each civilization rose and fell. The last few weeks before the Christmas holidays, we are learning about the fertile crescent area and the first recorded civilizations in that region such as Mesopotamia, Egypt, and Persia.

In Grades 7-8 social studies we learned about the beginning of agriculture and how that affected life for early humans on Earth. They each wrote a creative writing piece from the perspective of someone who lived during this time. As a class the students created a civilization timeline and map of the world during 1450 to present times to accurately visualize what civilizations existed and where they were on a map.

After our portfolio work the students learned about indigenous tribes of North America. They even enjoyed a visit from a Native American from the Iroquois nation share with us about their culture and way of life in the past and in present times. She was able to explain many things that are difficult to learn about when you are not a part of a tribe. This was informative and unique. Coinciding with that, students researched with a partner a specific regional group of Indians and created a multimedia presentation to share with classmates. These included videos, digital art, fake Facebook pages and Powerpoint presentations.

In December we will focus on the time around 1450 to 1700 when many nations began to explore and expand their lands through colonization and what the world looked like with many nations having colonies around the world. Seeing and experiencing how life was in the colonies, especially North America, is important to understanding what led to the formation of the United States.

Amy Kiddy

PK-8 Physical Education Workshop

Throwing was the motor skill of the month in PE. Throwing involves the whole body and requires balance, planning and executing movements in a sequential, coordinated way.

Pre-K and Kindergarten students participated in games and activities associated with throwing at a target while also doing their locomotive warmups and stretching.

Grades 1-4 students have been learning how to properly throw a football. We played "Collect the Coin" a game involving pairing up with a partner and throwing a football while collecting hula hoops.



Each hula hoop was assigned a "coin" amount, then they would calculate the amount. A great way for them to practice counting coins while practicing throwing. 3rd-4th grade also learned how to play flag football.

Grades 5-8 students learned how to properly throw a football with partners. They were eager to play flag football and have demonstrated how to be a good team player. They are learning strategy and how to include all players by recognizing how each team member can contribute. Overall they are having FUN and learning how to work together as a team.

We will continue to work on throwing next month but with frisbees. When the weather does not permit us to be outside we will do yoga inside. Yoga increases flexibility, balance and teaches techniques to breathe and relax their mind.

Sarina Eckhardt

PK-8 Art Workshop

One of our favorite activities during the month of October was a texture hunt. Students walked around CTL's campus finding items they could do crayon rubbings from such as bricks, wooden fences, rugs, etc. Once their papers were filled with colorful rubbings, artists went back to the classroom and added a watercolor wash over the rubbings. Later the papers were cut into strips and used to create paper weaving.

During the month of November in the Art Room students enjoyed creating 3D art projects that included 3D hats and 3D self-portraits. We also worked on our portfolios. It was fun to look back on the projects we had created since the beginning of the year. Students selected one of their favorite projects then wrote a self-evaluation. The project and the evaluation were then placed in their classroom portfolios and shared with parents during the 1st trimester student-led conferences. All the other projects were sent home.

After the portfolio project was complete, students had fun with pattern. Younger students created a patterned snake while the older students used socks to create patterned animals and other creatures. In addition to using a variety of patterns in the drawings, students also used overlapping which made for an interesting composition.

Finally, during the month of December the artists at CTL, discussed the history of the nutcracker and then drew detailed drawings of nutcrackers and colored their creations with regular and metallic markers. The results were stunning.

Pam Mayo





5-8 Drama Workshop

In drama class we have worked hard in November and December. Acting can be scary and intimidating, but at CTL we are family, and we are learning to become more relaxed and comfortable around each other. We worked on acting in improv situations by creating an imaginary situation with characters and acting it out. The students enjoyed doing this again and again, even planning their own situations and characters.

Drama students had chosen a play to work on at the very beginning of the year, so with that in mind we began learning how to involve the audience in their acting, staging and placement during a production, set arrangement and becoming their character to the best of their ability. The students played around with accents and actions that would fit a particular character or person. They had to remember to separate their character from themselves and not be self conscious during acting.

Our backstage crew kept the practice area clean and organized, helped move things around as needed and found and prepared music for the production itself. We were proud of the students for their hard work at making the play come to life and overcoming their fears during class.

December has seen us wrap up practice, come up with costumes for their characters and get ready to perform the play after the break.

Drama has been an amazing experience this year!

Amy Kiddy & Troy Bennett, Play It Right Music

CTL High

9-10 English I & II

In Grade 9 & 10 we had a brilliant first trimester. We finished our first read aloud book, the classic *Night* by Elie Wiesel. It was a beautifully-written memoir with strong themes surrounding identity and the human condition, allowing us to pause, ponder and think. We then switched gears and dove into a classic fantasy fiction tale, *The Hobbit* by J.R.R. Tolkien. The conversation around the rug has been lively and full of insights, connections, confusions, and clarifications.

We completed our first round of book projects, and I was happy with the quality and variety of the presentations given by everyone. Our second round of book presentations are just about to begin, and students will begin working to create their presentation scripts, putting a lot of thought into the themes presented within the books



they have chosen to read independently. Individually, our high schoolers have read everything from horror to historical non-fiction, from fantasy to murder mystery and everything in between. This leads to varied and interesting presentations—a keystone process in terms of building a community of readers and of young people who will go on to read throughout their adult lives.

In our writing workshop we completed our reflexive writing pieces. Students worked on several drafts of their memoirs and incorporated all of the lessons we discussed from looking at what makes an effective memoir compared to an ineffective memoir, ensuring we all had a strong theme and message. They worked hard on revisions, all the way from checking paragraphing and descriptive details to polishing our prose and finally editing it before sharing it with their peers. Publishing Day was well-celebrated, as we cheered on each student's progress and their writing journeys thus far. We look forward to our next Publishing Day.

We've continued to talk about figurative language, themes, and tone in a variety of written texts including song lyrics, backing up our analysis with strong quotations and examples. I am always so excited to see them transfer their literary knowledge from discussions we have been having around the rug during read aloud time to their own books and pieces we read together. It's a true honor being able to see them grow as critical thinkers and readers, and I am delighted to see our students enthusiastic about engaging with these ideas.

I am extremely proud to call myself their English teacher and feel lucky to be working with such a group of talented and creative young people.

Kristy Moreno

9-10 Geometry

In October in Geometry, students identified different types of angle pairs relationships such as complementary, supplementary, linear pairs and vertical angles. Review of Algebra I concepts was needed to solve more complex angle pairs problems which required writing a system of equations using two variables to solve for missing angles. We then moved into exploring angle relationships within parallel lines cut by transversals using Desmos, a math website with graphing capabilities. Students discovered the congruent and supplementary angle relationships that exist between corresponding angles, alternate interior angles, alternate exterior angles and same side interior (consecutive) angles. They applied these relationships with problems involving multiple sets of parallel lines and angles given only as expressions.



We then started discussing logic and reasoning as the basis of geometric proofs using a “who will win” scenario between a lion and a bear. Students had to research facts about lions and bears and provide facts to support their conclusion about which animal would win in a fight. This helped students see the application of logical reasoning used in fields such as law and computer science. Conditional “if-then” and bi-conditional “if and only if” statements were introduced as well as converse, inverse and contrapositive statements using non-math examples initially then extending to geometry examples. This built the foundation for students to begin working on geometric proofs with parallel lines concepts. Students were introduced to parallel line theorems and postulates that were developed based on the angle relationships found with parallel lines cut by transversals. Using these theorems and postulates, along with definitions and properties of equality and congruence, students completed two-column proofs to prove the congruence of specific angles or prove that 2 lines are parallel.

When we returned from Thanksgiving break, we shifted our focus to understanding the relationships between the equations of parallel and perpendicular lines. This required review of linear equations using points, slopes and different forms. We used Desmos to help visualize these lines and relationships and write linear equations in slope intercept form. More challenging problems involved finding the coordinates of points given only points on the parallel or perpendicular line. They are also working on designing a two-story gingerbread house on a four quadrant graph using parallel perpendicular lines. We will be voting on the best design this week then enlarging it to a poster size using dilations and decorating it as a gingerbread house.

We are beginning the Transformations unit where we will investigate translations, rotations, reflections, dilations, and compositions of multiple transformations. These topics will continue through January 2021. Please feel free to reach out to me with any questions or concerns via Remind Direct Message (Remind App - Geometry code @geomctl, Chemistry code @chemctl) or by email.

Rachelle Petrovic

9-10 Chemistry

In October, the 9th and 10th graders researched two elements of their choice and presented their findings to the 5th and 6th



grade science class who were also learning about elements and the Periodic Table. Students presented information such as atomic structure, Bohr atomic models and Lewis dot structures, electron configuration, isotopes, physical and chemical properties, bonding, reactions and applications of their chosen elements.

After our study of individual elements, we began learning about how chemical bonds occur between elements and resulting chemical compounds. Students explored different bond types such as ionic, covalent and metallic bonds and resulting properties such as hardness, conductivity and bond polarity. Molecular geometry shapes were discovered through a StemScopes PhET simulation technology activity which demonstrated the 3D shape created with compounds of 2 elements. They applied their knowledge of bond polarity and molecular geometry to determine if a molecule is polar or nonpolar which is the cause of the macroscopic properties we observe in real life. We observed some of these macroscopic properties when students “charged” both rubber and mylar balloons by rubbing them against their hair, and we observed how a stream of water was pulled toward the rubber balloon whereas the mylar balloon had no effect. This demo kicked off our investigation of intermolecular forces such as hydrogen bonding, dipole-dipole forces and London dispersion forces.



Students further investigated the effect of intermolecular forces by creating a notes page for their classmates and presenting a poster for a specific force. We also observed and explained how the surface tension of different liquids (water, oil and alcohol) allows some liquids to hold more paperclips in a given volume before overflowing. In addition, they examined the relationship between boiling point and structure of organic compounds of alcohols and alkanes using graphs and molecular models.



When we return in January, we will investigate the concept of the mole as a measurement unit in order to study chemical reactions and determine products. Please feel free to reach out to me with any questions or concerns via Remind Direct Message (Remind App - Chemistry code @chemctl) or by email.

Rachelle Petrovic

9-10 World History

In world history we learned about the neolithic revolution in human history that changed the way humans lived from





hunter-gatherers to farmers, thus creating the landscape for civilizations and more organized ways of living to form and prosper. The students chose articles to further expand their knowledge of this phenomenon and participated in speed discussions to share the information with each other.

As a culminating project, students wrote an essay detailing what they had learned about the neolithic revolution, agriculture, emerging civilizations, and the effects it had on population and families. With civilizations forming around the world and becoming more and more advanced, students created a timeline and a map of civilizations during the span of human history and focused more closely on the medieval time period of 500 to 1500. We learned how civilizations need certain things like trade, an economy, a form of government and militaries in order to survive and thrive. Each student chose a medieval civilization and created a chart with information about their civilization for each of the categories.

After portfolios, December saw students sharing the large amount of information they gathered about their civilizations chosen with their classmates. We have had many lively and interesting discussions based on what they learned. They will also create a “World News” newspaper from the medieval time period, authoring historical articles about their civilization’s government, rulers, foreign relations and life and culture of their citizens. Hopefully they are able to make it as real as possible while having fun with it, too!

Amy Kiddy

9-10 Spanish

Our Spanish students are closing 2020 stronger than ever and are more confident in their Spanish journey this school year!

After learning about the 21 Spanish-speaking countries, capitals, flags and culture as part of Hispanic Heritage Month, we moved into another amazing theme—The Day of the Dead! Dia de los Muertos.

During November the students made amazing skulls and had great oral presentations. For a Thanksgiving project they wrote thankful sentences in a “Thankful Turkey.” They had much fun chanting a Turkey song.

Our December learning activities went from how to describe others, family members, and their best 12 moments in 2020. As their Spanish teacher, I am proud of the great job they did with a family tree project. They were able to demonstrate their knowledge in writing, speaking with their unique creativity.

We are happy to close this interesting year with Spanish



Christmas carols, and a Christmas Tree decorated with their best moments in 2020.

In Trimester 2 we will be learning how to order food in a Spanish-speaking restaurant. We will also learn to describe their everyday activities. Without any doubt, great things await them on 2021!

Patricia Padraza

9-10 College & Career Readiness

In College and Career Readiness, we finished their 4-year plans for CTL. They were able to see what classes they need for core requirements to receive a CTL diploma as well as chose elective classes that will be most helpful for them in college and beyond based on their goals and plans as of now.

After the Thanksgiving break and portfolios were complete, we learned about the standardized testing needed for colleges they are interested in and the minimum scores on these tests most colleges expect. We explored how each type is scored and when these need to be taken during their high school careers. We were able to clarify that 9th graders will need to take the PSAT 9 in the spring, 10th graders will need to take PSAT 10 in the spring, and SAT and ACT are best taken in 11th grade. PSAT 10 and TSI is used for admission to Lone Star College's dual credit program in 10th grade.

In December, we continued taking a practice PSAT test and will score it and begin to learn test-taking strategies for success when taking standardized tests.

Amy Kiddy

