

## CALENDAR

- 12/8 All-School Meeting  
8:45 a.m. (American Room)
- 12/8 Pizza Lunch
- 12/8 Edible House Decorating  
Social sponsored by PACE  
3:30 p.m. (American Room)
- 12/15 Pizza Lunch
- 12/15 Elementary & Middle  
School Winter Concert  
2:30 p.m. (American Room)
- 12/20 Pizza Lunch
- 12/21- 1/1 Winter Break
- 1/2 School Resumes
- 1/5 PACE Parent Coffee Meetup  
and Meeting  
8:15 a.m. (American Room)
- 1/5 All-School Meeting  
8:45 a.m. (American Room)
- 1/5 ASM Spirit Day and  
Pizza Lunch
- 1/12 All-School Meeting  
8:45 a.m. (American Room)  
Pizza Lunch
- 1/15 School Closed  
(Martin Luther King Day)

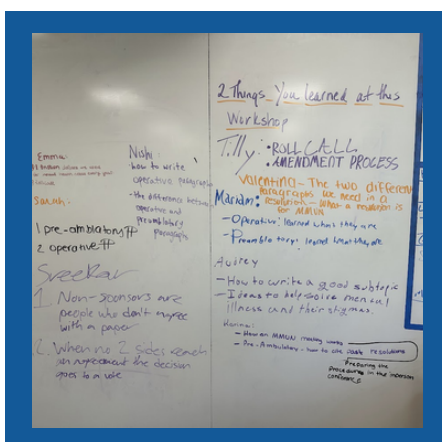
## Our Classroom



Seventh-Year students  
announcing the winner of the  
candy corn guessing contest at  
our All-School Meeting.



Students enjoying a  
Thanksgiving treat provided by  
our wonderful room parent!



Student reflections  
following our first MMUN  
Working Session.



Our recent field trip to  
Memorial Hall Library,  
where students learned  
about using online databases  
to find sources.

## Humanities

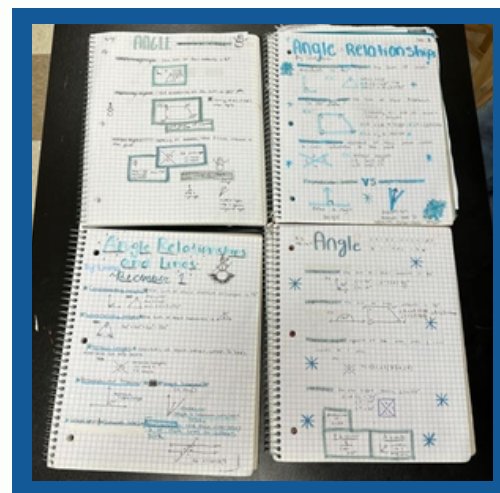
We have just wrapped up Chapter 13 about life in the 1800's and what it meant to be American. We are now working on a project to review Chapter 11-13 before our unit test on Thursday. By incorporating project based learning, students can represent their learning in the various modalities. Next week, after our unit test, we will start chapter 14 about The Growth of American Democracy.

We took our MMUN field trip to the library so that students could research more about their topic and start crafting and collecting quality sources for their draft of their essay. We are working towards crafting our rough draft of our long term position paper project alongside the MMUN Middle School field trip to NYC in the Spring.



## Pre-Algebra

Seventh-Year students have completed our second unit, comparing and scaling, which introduced the concepts of ratios, proportions, and percentages. Students are now well-versed in the use of fractions to make a comparison or find an equivalent representation. We also used ratios to convert measuring units in given problems, allowing for student exploration into more real-world problems and applications of proportional relationships. We have now moved onto our third unit, "Stretching and Shrinking: Understanding Similarity." Students have learned about what it means for figures to be similar to each other, and how to generalize the properties of similar figures. Our upcoming classes will focus on identifying similar figures by comparing corresponding sides and angles, as well as comparing similar figures with nonsimilar figures. Later in this unit, we will begin our investigation into the Pythagorean theorem and transformations (translation, reflection, and rotation).

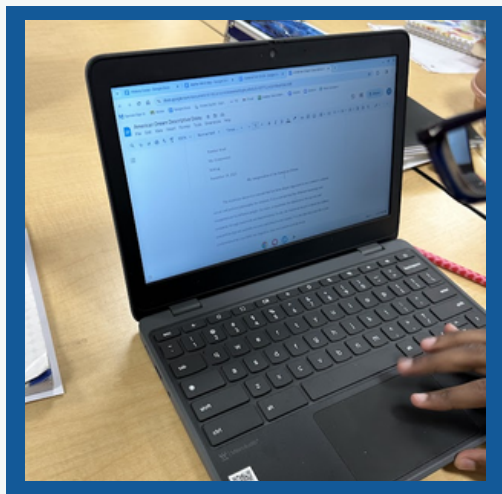


## Algebra

Ancient mathematicians, such as Diophantus, held a deep fascination for numbers that could be visually represented through geometric shapes. These are known as **figurate numbers**. In our exploration of patterns, the students discovered various patterns emerging from different types of numerical sequences. One particularly interesting sequence they studied is known as square numbers. This sequence represents numbers that can form perfect squares, much like tiles laid out in a square pattern. Another sequence they explored includes triangular numbers, which visually form equilateral triangles, and rectangular numbers, representing numbers that can outline rectangles. Additionally, the students delved into the understanding that sequences composed of numbers with two linear factors fall under the category of quadratic sequences. Through their exploration of figurate numbers, they learned that the formulas representing the sequences of triangular and rectangular numbers are, in fact, quadratic equations. This realization allowed the students to make a connection between simple numerical sequences and more complex algebraic concepts, showcasing the interplay between geometry and algebra in mathematics.





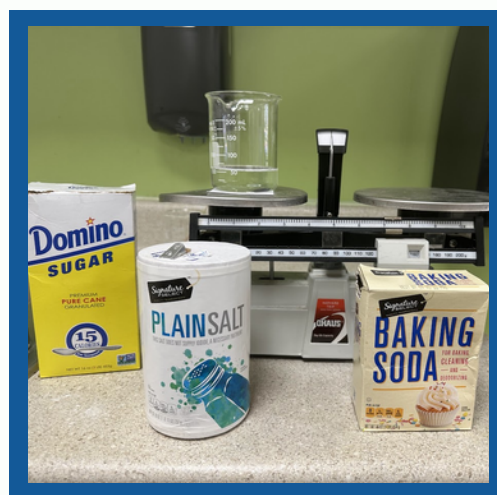


## Language

We finished our personal narrative essay and have begun drafting our American Dream essay. These essays are about what the American Dream means to each student. We are learning how to craft an essay with a coherent introduction with a thesis, a body that supports and goes further into detail and a reflective conclusion. We have just finished the chapter grammar test this week and are moving onto chapter 5 grammar. For vocabulary, we had our unit test over 4-6 and are on chapter 7.

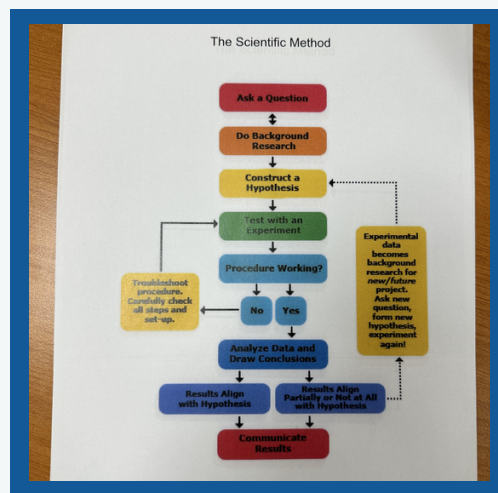
## Science / STEM

In science class, students have completed their study of chemical reactions. We discussed how changes in matter can be physical or chemical, and identified ways to tell that a chemical reaction has occurred. Students also learned about the information contained in a chemical equation, including reactants and products, and how to balance both sides. We covered the different categories of chemical reactions, and the role that activation energy plays in the progress of a reaction. Students also studied factors that affect the rate of a chemical reaction. We concluded our study of chemical reactions with a *Mixtures and Changes* Lab, relating to our exploration of the Law of Conservation of Mass. Students hypothesized what would happen when combining salt and vinegar, vinegar and baking soda, and salt and sugar, gathered and analyzed data, and wrote conclusions evaluating their original hypotheses.



## Looking Ahead...

In STEM, students have met with their teachers to discuss their topics. After receiving feedback, students moved onto identifying variables and crafting their problem statements. We are now moving onto the research portion of this project, where students will have to compile information for the scientific background portion of their lab report.



[Click here for more classroom photos!](#)