

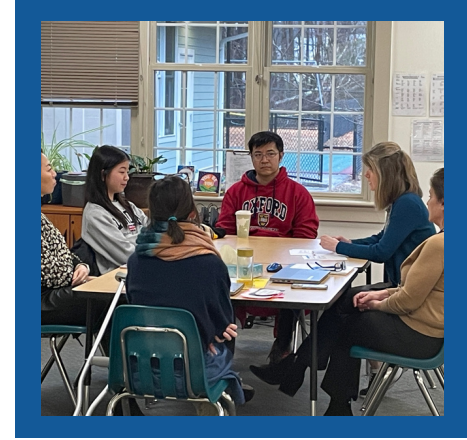
## CALENDAR

- 4/5 PACE Coffee Meetup and Members Meeting  
8:15 a.m. (American Room)
- 4/5 All-School Meeting  
MIDDLE SCHOOL  
Presents on MMUN trip  
8:45 a.m. (American Room)
- 4/5 Pizza Lunch  
ASM Spirit Day  
(wear ASM gear or school colors)
- 4/5 Movie Night  
Sponsored by PACE  
6:00 p.m.
- 4/8 Solar Eclipse!
- 4/9-11 Scholastic Book Fair  
American Room
- 4/12 All-School Meeting  
8:45 a.m. (American Room)  
Pizza Lunch
- 4/15-19 No School - April Break
- 4/26 All-School Meeting  
8:45 a.m. (American Room)  
Pizza Lunch
- 4/26 Earth Day Celebration  
Sponsored by PACE  
3:30-4:30 p.m.

## Our Classroom



Middle School students using work cycle time productively to complete their Spring Conference Reflection or other important work that needs to get done.



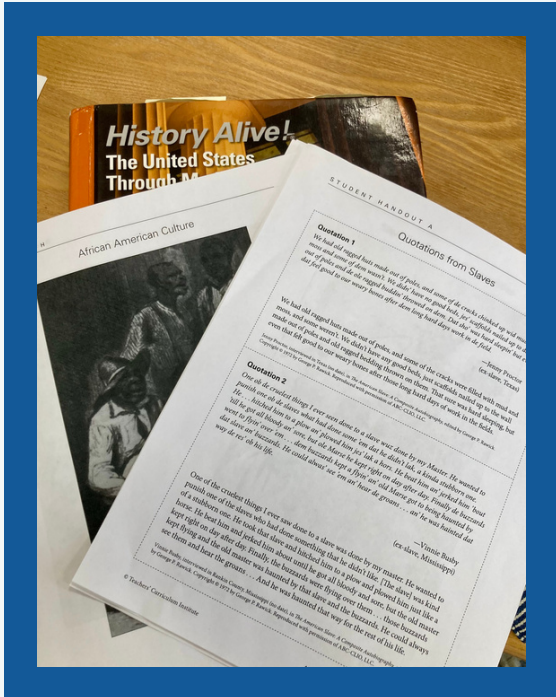
During Spring Conferences, Middle school students engaged in reflection. Responses were thoughtful and provided insight on accomplishments for each subject.



Students worked on writing their essay during silent writing time. Students were focused and utilized their time productively.



In science, students engaged in a tug of war activity to demonstrate how a force is a push or a pull and calculated the net force of multiple scenarios.



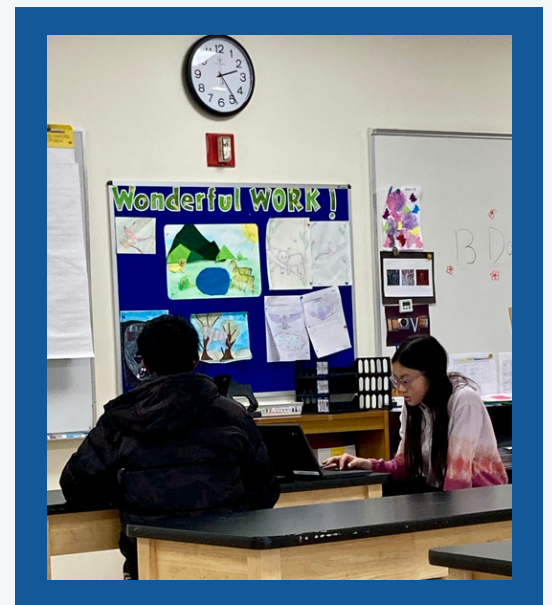
## Humanities

In History, we studied African Americans in the Mid-1800s by analyzing the essential question: How did African Americans face slavery and discrimination in the mid-1800s? Students engaged in an activity where they matched images to quotations and then had to read the section that described both, while answering the questions that corresponded with the reading. This activity provided valuable insight as students were able to see different aspects of this time period and how people coped with immense struggle. Next, we are looking at chapter 20, A Dividing Nation, in which we will think about the question: Which events of the mid-1800s kept the nation together and which events pulled it apart?

## Language

In Literature Circle, we have been working on identifying textual evidence to use for our Reflective Essay on community values. Coming up, we will be reading the short story "Seventh Grade" by Gary Soto. In Writer's Workshop, students are working on their Reflective Essay about The Giver community and their unique community. Students are continuing the writing process for their body paragraphs and conclusion. We will be revising and editing before finishing the essay and returning to wrap up the short story.

In Vocabulary, students engaged in a spelling/definition bee to challenge their knowledge of words from chapter 13. They demonstrated a strong sense of vocabulary and camaraderie as the class was divided into two groups for 7th and 8th grade and each person had their turn. Coming up, students will be assessed on chapter 14 and then we will continue with chapter 14 exercises.



## Pre-Algebra

7th years have been running a lot of simulations and playing a variety of probability games to learn about fair and unfair games, tree diagrams, experimental vs. theoretical probability, and the law of large numbers. They explored and developed probability models by identifying possible outcomes and analyzing probabilities to solve problems.

Along with note taking skills and practice problems, students also reflected on the concepts learned through an investigation 1 and 2 reflection. This reviewed concepts learned and reinforced the fact that the more trials that are run in an experiment the better the data and the closer the experimental data is the the theoretical probability.

Students also discovered that Venn Diagrams, Mazes, and Tree Diagrams are all different ways they can find the probability of an event. Students also realized that making organized lists can make keeping track of all the possible outcomes a lot easier.

Hey! A new maze!

Today we're going to see the Law of Large Numbers in action!

What is the Law of Large Numbers?  
As the number of experiments increases the number of experimental outcomes will get closer to the theoretical probability.

First, draw a tree diagram to represent the maze. Use boxes to represent forks in the maze.

Now, we need to find the expected outcome. To find the percent of people we expect to get into each room, start with 100 people at the entrance. Remember, this is math, so it's ok to have a fraction of a person (this is not a real experiment!).

Redraw Maze Here

% in A: 33%  
% in B: 33%  
% in C: 33%

### Factoring Polynomials

- Look for the GCF

ex. 1)  $6x^2y + 5x^2z = x^2(6y + 5z)$

2)  $2ay + z = 2(ay + \frac{z}{2})$

3)  $2xy - xy^2 + 3xy = xy(2 - y + 3x)$

4)  $8x^2 - 12x = 4x(2x - 3)$

5)  $12a^2 - 18a^2 + 3a = 3a(4a^2 - 6a + 1)$

### Factoring Trinomial:

Case 1:  $x^2 + Dx + E = (x+a)(x+b)$

- all pos signs
- coefficient of  $x^2$  is 1
- sum of factors of  $E = D$

ex/  $x^2 + 8x + 15 = 53$      $5+3=8$      $5 \cdot 3 = 15$     ex/  $x^2 + 7x + 12 = 43$

$(x+5)(x+3)$      $1+15=16$      $(x+4)(x+3)$

ex/  $x^2 + 13x + 42 = 43$      $4+9=13$      $4 \cdot 9 = 36$      $4+9=13$

$(x+6)(x+7)$      $1+42=43$

## Algebra

Upon returning from MMUN, students have begun exploring quadratics in algebra class. This unit will guide students through an in-depth examination of quadratic functions. Initially, we will explore different strategies for solving quadratic equations, such as factoring and applying the quadratic formula. As students gain mastery over these techniques, we will transition to examining real-world applications of quadratic functions. Quadratics are essential for modeling numerous real-life scenarios, allowing students to tackle various problems and formulate corresponding quadratic expressions. Practical examples include modeling the trajectory of a projectile or the flight path of a rocket, as well as the curve described by a thrown baseball. Emphasizing practical applications in our mathematics curriculum ensures that students recognize the diverse uses of math across multiple disciplines.

## Science / STEM

In science class students talked about motion, speed, velocity, and acceleration. They graphed distance vs. time graphs and speed vs. time graphs using given data. They learned that acceleration is not just speeding up, but slowing down, and any change in direction as well. They used the formula to calculate the average acceleration in a given problem, using initial speed, final speed, and time. We began talking about forces such as friction and gravity and how this will all tie in to Newton's Laws. Students also began the process of creating a study guide, using class notes and the textbook to help them, to prepare for a Motions and Forces test coming up before Vacation.

In STEM, students continued building and testing their "Extractinators" to help collect microplastics from a tub of water. They learned how to build a circuit correctly to add motors to their prototypes and will continue work on this next week as well before they give a final presentation.



## Looking Ahead...

Students will be presenting on their recent trip to the MMUN conference next Friday, April 5 at the All-School Meeting. Students have reflected on the importance of being a change maker and how their values and beliefs have been challenged. They have also discussed in partners the process of writing and preparing their speech for the conference. The presentation will include photos and personal examples from the reflections students have engaged in. We hope to see you there!

A screenshot of a student's reflection on a computer screen. The text reads: "I learned that I want to actually make a change in the world and help people who are suffering from the issues that we covered for MMUN, because everyone deserves to have stability in their living situation and in their environment." There is a cursor at the end of the text.

I learned that I want to actually make a change in the world and help people who are suffering from the issues that we covered for MMUN, because everyone deserves to have stability in their living situation and in their environment.