



SPARKNotes

Students Pursuing Advanced Reasoning & Knowledge

January 10, 2025

Calendar

January

2-17 Open registration for SPARK families for the 2025-2026 school year

14 Student Council lunch meeting

15 Pilates after classes

22 Portraits for yearbook taken today

30 Field trip to watch play at Bonita Performing Arts Center

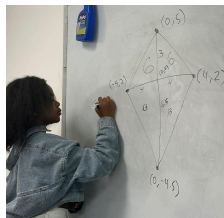
March 11-13 - Spring Break

May 28 - 2nd Semester Presentations

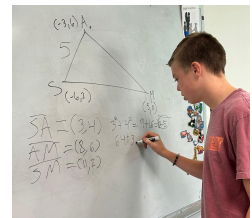
May 29 - Last day of classes

Lesson Summaries

Geometry



Before break, we wrapped up our Module 4 study of shapes in the coordinate plane. Students practiced finding the area and perimeter of various figures using right triangle trigonometry and the subtraction method. After returning, we spent the week reviewing Modules 1-4 to prepare the students for their Segment 1 Cumulative Midterm Tuesday.



Algebra

We began our unit on functions. This begins our two month study of all things lines and graphing; what I call the main course of algebra. The vocabulary is important because many of the terms will be new to the students so they need to make sure they understand and know how to apply them.

Math

We began our introduction to variables, a fundamental algebraic concept. This is new for Math 6 students, but will be a review for Math 7. Example: $x + 6 = 15$; $15 - 6 = 9$; therefore, $x = 9$.

Science

We started our Weather and Climate Unit by learning about the layers of the atmosphere and the significance of each layer. We also learned what variables affect weather. In order to bring these concepts to life, I conducted several experiments.

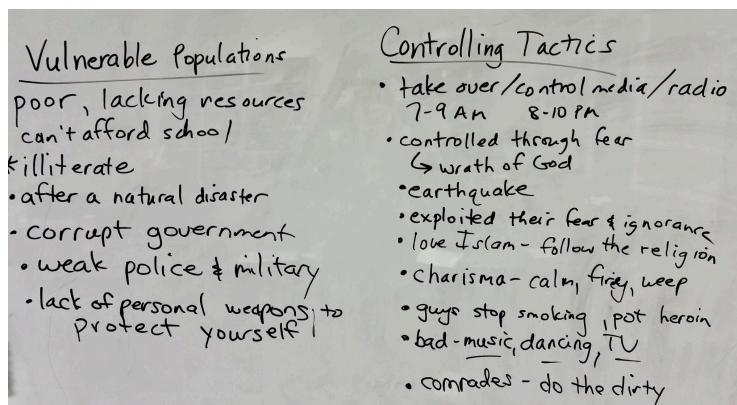


In the experiment at the left, Milla is a human thermometer guessing the temperature of three different buckets of water while blindfolded. In the experiment to the right, Reed bravely volunteered to let me put a jar full of hot water over his head to demonstrate surface tension and air pressure. To show how hot air rises and cold air sinks, I put red food coloring in the hot water and blue in the cold water. To demonstrate insolation and how the angle of the Sun heats the Earth depending on the time of day, the students drew their shadows at 10:00AM, 12:00PM, and 2:00PM. You can see the results on the left. Students will be presenting their own weather related experiments to the class this month.



Language Arts

We started our study of the book *I am Malala*. The students learned about the Swat Valley in Pakistan where she lived and also many new terms such as Islam, Quran, jihad, Sharia Law, Taliban, and burqa. We made a list of vulnerable populations and controlling tactics of leaders that make a recipe for dictatorship. These elements are found in most regimes, which we will see when we watch the play *The Boy from Block 66* during Hitler's reign of terror.



Social Studies

To introduce Japan to the students, I wanted to grab their attention by exploring some of the originality and innovation of this country. From wasabi flavored Kit-Kats to robot run hotels, students were exposed to fascinating aspects of Japan. We then looked at its geography and students took notes on some of the larger islands and cities of Japan. Finally, we read about the clans of Japan and how they still impact modern society. Next week, we will study the culture and religion of Shinto.