



8-3 TEAM NEWS

Math Algebra

In the month of December, Algebra students will be learning about Standard 6 which covers Inequalities. This includes one step, two step, multi-step, and compound inequalities. We will then apply our knowledge to writing inequalities from context and graphs. All Algebra students will be taking the Semester 1 Final Exam on December 18th and 19th. The Final Exam is worth 15% of their overall grade and cannot be retaken. Students will be provided with a study guide to help prepare for the final. The final will cover all standards taught this semester. I encourage students to go back through the blendspace of all the units and re-watch any videos or re-work any exit slips, class work or homework worksheets. There are plenty of extra resources in the blendspaces for the students to use to prepare for the test.

Reminder that your decision whether your student will take Algebra for High School credit is due at the end of the semester; please refer to the emails I have sent for the tinyurl link to make your decision.

In the month of January, Algebra students will be focusing on Standard 7 Systems of Equations. We will be solving them in three ways: graphically, using substitution and using elimination. We will discover and learn about special cases and what they truly mean both algebraically and graphically. To wrap up our unit, we will be discovering how systems are relevant using context and solve systems to answer real world problems.

Please remember, it is very important that your student keeps an organized notebook of all notes/homework sheets! Please remind your student to always have their calculator, homework, binder, and pencil for class!

Math 8

As we begin the wintery month of December, the Trailblazer mathematicians will be using context and real world situations and figuring out how to represent these situations as functions. We will still be exploring situations through tables, graphs and equations, so make sure your student has plenty of graph paper!

When we return in January, students will apply their knowledge of linear functions to our Statistics Unit. Students will be working with and understanding scatter plots as well as drawing lines of best fit and writing equations for those lines.

Students should be completing all homework, mostly using Discovery Education, and coming to class with the appropriate materials (math notebook, pencils, and a calculator). Homework is given on a daily basis and is extremely important to be completed. Please help encourage your child to be responsible and to complete homework and to study for tests.

Lastly, students are reminded that they can retake unit tests after they have completed the extra practice (found at the end of the unit's Discovery Education board) and test corrections (can be done during AR time or after school). If you have any questions about the process, parents and students are encouraged to please contact me.

Science

We will spend the beginning and middle of winter learning about the History of Life and Geology of Planet Earth. Throughout this unit we will include why it is important for new discoveries and ideas to be questioned and how scientific concepts become accepted theory. This is part of our continuing effort to ensure that our students are not only capable and curious, but also critical consumers of information-- learning to tell fact from fiction.

Beginning at the end of November and into December and January, we will be learning about the age of Earth and the events that led up to the present. Students will be creating a model of the geological timeline to help put those events in perspective. We will also learn about how we know this and the discoveries that have happened over the last hundred years or so.

We now know that the Earth's surface has moved and continues to move! Even though Alfred Wegener did not have all the evidence, he realized that the continents were moving almost one hundred years ago. As technology improved, information became available that proved Wegener hypothesis of continental drift to be true. We will learn that forces beneath Earth's surface are causing a slow, but steady, movement of Earth's outer layer. These forces are what caused the ancient supercontinent of Pangaea to break up and are the reason our continents are located where they are today. Students will be able to explain how the convection currents in Earth's mantle move the tectonic plates that cover its surface. In January, we will study the effects of this movement. We will find out how moving plates created the Himalayas, the deep trenches and mountain ranges at the bottom of the world's oceans, and how they cause volcanoes, earthquakes, and tsunamis. In addition to learning about the natural hazards caused by plate tectonics, students will explore our impact on the cycling of materials through plate tectonics and the rock cycle.

Challenge scientists have completed their first project and are eagerly awaiting their second semester project to be given out in January.

Social Studies

Our Young Historians are completing their study of the American Revolution and the struggles the first American citizens had to endure to secure their blessings of life, liberty, and the pursuit of happiness. We have investigated how colonial taxation without Parliamentary representation, as well as a series of other grievances against the King, prompted patriots to declare independence from Great Britain. Our historians have explored key battles of the Revolutionary War, met Founding Fathers and Patriot leaders, debated the views of colonial Loyalists and Patriots, and examined and used the Declaration of Independence as a primary source document.

Building upon this knowledge, we will move forward to better develop a deeper understanding of how a young United States of America grew from thirteen independent colonies into a cohesive nation. The road from infancy to powerful country was not easy or without obstacles. The Articles of Confederation provided the framework for our nation's first system of government; yet it no longer is in effect. We will explore how the U.S. Constitution replaced the Articles of Confederation, how our federal government is structured, and how the Bill of Rights protects our liberties in the past and today. January will take us into the presidential administrations of Washington, Adams, and Jefferson as our Young Historians discover how the nation expanded and grew socially, politically, and economically.

English/Language Arts

In December and January, our scholars will continue to strengthen their research skills and literary analysis prowess. Students will use the knowledge they gained from formulating argumentative outlines in order to choose their own topic (as long as they have not written about this topic before) about which to

write a Position Paper. They will continue to analyze author's purpose, tone, point of view and bias so that they are able to determine the reliability of media sources as they move through our digital content-driven world. Regarding evidence, students will strengthen their skills with organizing, synthesizing and citing multiple sources. Beyond presenting evidence, Trailblazers will continue to develop their abilities with critically analyzing textual evidence in order to build compelling and focused arguments. In January, students will form book clubs in order to read dystopian novels of their choice. While reading dystopian novels, students will garner their writing skills in order to write literary analysis papers. As we engage with these intensive and exciting units of study, students are encouraged to stay on track with their independent reading goals. As a reminder, students are expected to read at home, a book of their choice, for at least 30 minutes each day in order to build their reading skills and achieve their independent reading goals for class.