

8th Grade 2017/18 Curriculum Packet

Attendance/Tardiness: Make sure your child gets to school on time each day. Entering the room late is disruptive. **(Think Ahead: High schools will check for excessive tardiness when reviewing the applications of potential students.)**

Homework: We believe homework should be meaningful and directly linked to our curriculum. This is another way to foster independence and the home school connection. Homework is a way for students to practice skills and reinforce familiar concepts at home. It may also be a way to explore a new concept at home in preparation for an upcoming classroom study. Homework is not meant to be burdensome for families, or cause stress for the children. If your child is having difficulty with something please write a note to let me know what they are having trouble with. Homework will be assigned each night in a Student Planner and due the next day unless otherwise specified. Behavior

Work Ethic: Students are expected to work hard and take pride in their work. This includes: using class time wisely, getting to work immediately, staying focused on a task, completing assignments thoroughly, and showing pride in both their work process and products.

8th Grade Mathematics

Trevor Buckley/Ricky Reid

Unit 1: Expressions, Equations & Inequalities	Students analyze and explain precisely the process of solving an equation. Through repeated reasoning, students develop fluency in writing, interpreting, and translating between various forms of linear equations and inequalities and make conjectures about the form that a linear equation might take in a solution to a problem. They reason abstractly and quantitatively by choosing and interpreting units in the context of creating equations in two variables to represent relationships between quantities. They master the solution of linear equations and apply related solution techniques and the properties of exponents to the creation and solution of simple exponential equations. They learn the terminology specific to polynomials and understand that polynomials form a system analogous to the integers.			
Unit 2: Graphs & Functions	In Grades 6 and 7, students worked with data involving a single variable. This unit introduces students to bivariate data. Students are introduced to a function as a rule that assigns exactly one value to each input. In this module, students use their understanding of functions to model the possible relationships of bivariate data.			
Unit 3: Linear Relationships	Students extend what they already know about unit rates and proportional relationships to linear equations and their graphs. Students understand the connections between proportional relationships, lines, and linear equations in this module. Students learn to apply the skills they acquired in Grades 6 and 7, with respect to symbolic notation and properties of equality to transcribe and solve equations in one variable and then in two variables.			
Unit 4: Systems of Equations	There are two overarching goals of this Unit: to develop student understanding of the methods in which systems of equations and inequalities with two variables can be used to model problem situations; and to develop skills in the graphic and symbolic methods needed to solve those systems.			
Unit 5: Statistics	Students reconnect with and deepen their understanding of statistics and probability concepts first introduced in Grades 6 and 7. Students develop a set of tools for understanding and interpreting variability in data, and begin to make more informed decisions from data. They work with data distributions of various shapes, centers, and spreads. Students will also be introduced to bivariate quantitative data.			
Unit 6: Exponents & Exponentials	Students expand their basic knowledge of positive integer exponents and prove the Laws of Exponents for any integer exponent. Next, students work with numbers in the form of an integer multiplied by a power of 10 to express how many times as much one is than the other. This leads into an explanation of scientific notation and continued work performing operations on numbers written in this form.			
Unit 7: Volume	Students apply their knowledge of volume from previous grade levels to the learning of the volume formulas for cones, cylinders, and spheres.			
Unit 8: Geometry & Transformations	Students learn about translations, reflections, and rotations in the plane and, more importantly, how to use them to precisely define the concept of congruence.			
Unit 9: Polynomials & Factoring	For students, polynomials and factoring is very important in many aspects. Understanding polynomials along with how to factor them lays the groundwork for a multitude of different topics.			
Unit 10: Algebraic Fractions	Students will be learning how to multiply, divide, add and subtract algebraic fractions.			
Unit 11 Polynomials & Quadratic Functions	Students continue to interpret expressions, create equations, rewrite equations and functions in different but equivalent forms, and graph and interpret functions, but this time using polynomial functions, and more specifically quadratic functions, as well as square root and cube root functions.			
Grading Policy	Summative Assessments: 50%	Formative / Performance Assessments: 30%	Homework: 10%	Preparedness: 10%

8th Grade Humanities - Jennifer Aaron

How does our sense of belonging impact our identities?

Timeline	September-December	January-March	April-June
Essential Question	Is the “American Dream” achievable?	Are people born <i>good or bad</i> ?	Who decides who belongs?
Research Topic	The Great Depression	The Holocaust	The Refugee Crisis
Main Reading	<i>Of Mice and Men</i> by John Steinbeck	<i>Night</i> by Elie Wiesel	<i>Nujeen: One Girl’s Incredible Journey from War-Torn Syria in a Wheelchair</i> by Nujeen Mustafa with Christina Lamb
	<p>The Roaring 20s came to a halt when the Stock Market crashed in 1929. As a result, many Americans had to become a very different version of the person they had always been in order to survive. In this unit, students will learn about the causes of the Great Depression and put themselves in the shoes of various people during this time in order to explore its effects on Americans.</p> <p>Through reading <i>Of Mice and Men</i>, the fictional story of two migrant farms workers in the 1930s, we will explore the Depression in connection with the “American Dream,” intellectual disabilities, race, labor laws, criminal justice, and what it means to show mercy. Students will reflect on the similarities and differences between how Americans felt about these topics in the 1930s and how Americans feel about them now.</p> <p>Students will write a historical fiction piece in which they showcase how someone’s “American Dream” was affected by the Great Depression. Students will also use <i>Of Mice and Men</i>, real court cases, and data to write an argumentative essay explaining their thoughts on whether or not they believe intellectually disabled criminals should be treated differently.</p>	<p>The Holocaust is often thought of as something that happened suddenly because of one bad man. In this unit, students will discover how seemingly small choices made by everyday citizens incrementally contributed to the rise of the Nazi party, and, eventually, led to the horrific events of the Holocaust.</p> <p>In <i>Night</i>, author Elie Wiesel shares his real-life experiences of being an Eastern-European Jewish teenager during the Holocaust. Everything he believes is turned upside down during his time in concentration camps with his father. Throughout the book, we will discuss issues of identity, loyalty, guilt, family, humanity, faith, and how people justify their actions.</p> <p>Students will discuss Elie’s changing identity and moral universe in a literary analysis essay on <i>Night</i>. Students will also synthesize the information they gather throughout the unit in order to create designs and writing pieces that showcase how particular groups were affected by the rise, occupation, and fall of the Nazis.</p>	<p>There are more displaced people today than at any other time in modern history. Many of today’s refugees are coming from the Middle East, particularly Syria. In this unit, students will unpack what is happening in the Middle East today in order to understand why people are leaving their homelands and examine how that impacts the rest of the world.</p> <p>In 2015, 16 year-old Nujeen Mustafa escaped Syria. In her book, she shares what life was like in Syria before the war, why she and her family fled, and the challenges she faced as both a refugee and as someone making the difficult journey across several countries in a wheelchair. As we read Nujeen’s book, we will examine topics such as race, gender, disabilities, perseverance, and belonging.</p> <p>Students will look at various sides of the immigration issue in order to form and state their own opinions about the US accepting foreign refugees in an argumentative essay. Students will also create an informational piece that explains the Refugee Crisis to American teens- including common misconceptions and ways an American teen could help the refugees.</p>

Grading Policy

Participation (Preparedness, Effort, Behavior)	Classwork	Homework	Assessments (Tests, Essays, Projects)
15%	35%	15%	35%

**---8TH GRADE SCIENCE---
ELSA TIPPY**

	1	2	3	4
Unit Name	Unit E: Ecology	Unit F: Evolution	Unit B: Body Works	Unit G: Bioengineering
Approx. Dates	9 weeks	6 weeks	4 weeks	4 weeks
Essential Questions:	What are the relationships between an organism and its environment? What effect do humans have on these relationships?	How did the variety of organisms on earth come to be? What are the sources of evidence that help us understand the evolution of life on earth?	What choices do you make about your health each day and how do these decisions affect your health in the future? What type of information could help you make better decisions about your body?	How is invention related to life science? How are new solutions to problems in life science developed?
Focus/Key Concepts	Students consider what happens when a new species is introduced into an ecosystem as they model ecological relationships within an ecosystem; simulate the effect of competition, predation and other factors on population size; and investigate local ecosystems.	Students consider whether an extinct species should be brought back to life as they examine fossils, consider the lines of evidence for evolution, natural selection, and the role of genetic mutations. Students evaluate the impact of humans on the extinction/evolution of species.	Students explore the role of organ systems in providing nutrients and oxygen to the body and transporting and eliminating wastes (maintaining internal balance). The unit focuses in-depth on the cardio-pulmonary system as students investigate heart disease, nutrition and exercise.	Students consider how biotechnology can improve the lives of humans as they adapt to their external environment. Students construct, evaluate and revise their prototypes of tools and products as they explore the design process. The contributions of various individuals to the fields of science and biotechnology are presented and discussed.
Focus	<u>Culminating Project(s):</u> <ul style="list-style-type: none"> • Invasive Species Choice Project • Summative Exam 	<u>Culminating Project(s):</u> <ul style="list-style-type: none"> • Think Dots Activity • Evolution Essay • Summative Exam 	<u>Culminating Project(s):</u> <ul style="list-style-type: none"> • Health Brochure • Lab Report • Summative Exam 	<u>Culminating Project(s):</u> <ul style="list-style-type: none"> • Mechanical Arm Prototype • Summative Exam

SCIENCE GRADING POLICY

Summative Assessments: end of unit projects, exams, presentations, lab write ups, or posters.	35%
Quizzes: given biweekly on the topics that have been included in those two weeks	30%
Science Notebook: organized notebook setup, proper and complete notetaking, inclusion of diagrams and drawings, neat and legible	25%
Homework: end of activity questions, article responses, unfinished classwork	10%