

# 8th Grade Curriculum

## Math

- Addition, subtraction, multiplication and division of Algebraic equations
- Rates, ratios, probability, and relative frequency
- Slope of a line
- Slope intercept equations for line
- Exponential growth
- Linear versus exponential growth
- Laws of exponents
- Quadratic equations: graphing and solving
- Factoring quadratic equations
- Solving systems

## Language Arts

### Course Texts:

*Wordly Wise* Book 6  
*Grammar, Usage and Mechanics* (GUM)  
Novel Study: *Of Mice and Men* by John Steinbeck, *The Book Thief* by Markus Zusak, *To Kill a Mockingbird* by Harper Lee,  
Selected Short Stories and Plays,  
Informational Text/Resources

### Course Objectives:

- Build a foundation of skills, processes, and strategies that support and guide the development of readers, writers and analytical thinkers
- Expand on each student's ability to read and respond to texts by annotating text effectively and participating in a variety of discussions
- Explore and understand literary elements and devices
- Scaffold the development of structured writing and free writing through guided practice and formative assessment
- Integrate writing throughout language arts via writing workshop, journal entries, on-demand writing, and novel study
- Review, extend and integrate grammar, usage, and vocabulary, thus providing a context for understanding and implementing effective writing practices

### Areas of Study:

Analyzing literature and expository text, reading comprehension, the writing process, grammar, vocabulary, speaking and listening.

## Science

Curriculum: California Next Generation 8th Grade Science Standards

Learning Platform: *Discovery Education*, online resources and Techbook

Learning Management System: Google Classroom

Course Description: Physical Science - introduction to physics and engineering

Students explore Newton's three laws of motion, engage in labs to calculate speed and understand velocity and momentum. They create graphs to record data and analyze their findings. Students use laws of physics to build complex contraptions from simple machines.

Students engage in inquiry-based learning, through investigations that encourage innovation and collaboration that bridge disciplinary boundaries.

### Course Objectives:

- To provide a foundation of facts, processes, basic concepts, principles and applications of science
- To develop skills of observation, descriptions, and critical thinking
- To develop skills in collecting, organizing, and communicating scientific data
- To promote the "doing" of science through inquiry and hands-on activities both in the laboratory and at home
- To foster a love of science by connecting the classroom science curriculum to the world we know today
- To help each student to develop solid organizational skills and study habits that support high school science curriculum
- To give students a strong analytical writing program explored through scientific inquiry

## Social Studies

### European and American History:

- European Feudalism
- Aztec, Incan & Mayan Empires
- Spanish Colonization of the Americas
- European Exploration of the Americas
- English Colonies
- American Revolution
- Early American Government

## Religion

- The Bible
- Prayer
- The 5th through 7th and 9th and 10th Commandment
- Sacraments of Confirmation and Marriage
- Connecting Liturgy to culture
- Morals and Values
- High School Preparation