

Curriculum Overview 2015-2016

EIGHTH GRADE

LANGUAGE ARTS

- Reading
 - Fluency
 - Vocabulary Development
 - English Words derived from Latin, Greek or other linguistic roots and affixes
 - Dictionary work
 - Comprehension
 - Literary Theme and Genre
 - Analysis
 - Poetry
 - Drama
 - Fiction and NonFiction
- Writing
 - Elements of the writing process
 - Planning
 - Drafting
 - Revising
 - Editing
 - Publishing
 - Developing Thesis
 - Editing
 - Editing for Grammar
 - Mechanics and spelling
- Research
 - Research Plan
 - Gathering Sources
 - Synthesizing information
 - Organizing and presenting ideas
 - Listening and Speaking
- Reports

MATH

- PreAlgebra
 - Algebraic Expressions and Integers

- Solving One-Step Equations and Inequalities
 - Decimals and Equations
 - Factors, Fractions, and Exponents
 - Operations with Fractions
 - Ratios, Proportions, and Percents
 - Solving Equations and Inequalities
 - Linear Functions and Graphing
 - Spatial Thinking
 - Area and Volume
 - Right Triangles in Algebra
 - Data Analysis and Probability
 - Nonlinear Functions and Polynomials
- Algebra
 - Variables, Function Patterns, and Graphs
 - Rational Numbers
 - Solving Equations
 - Solving Inequalities
 - Graphs and Functions
 - Linear Equations and Their Graphs
 - Systems of Equations and Inequalities
 - Exponents and Exponential Functions
 - Polynomials and Factoring
 - Quadratic Equations and Functions
 - Radical Expressions and Equations
 - Rational Expressions and Functions

SOCIAL STUDIES

- US History from Early Colonial Period through Reconstruction
 - US Constitution
 - Early Republic
 - Westward Expansion
 - Civil War
 - Reconstruction
- Geography
 - Places and regions of the United States; Past and Present

- Government
- Declaration of Independence
- US Constitution
- Magna Carta
- Bill of Rights

- The Universe
- The Solar System
- Earth, Sun and Moon System
- Formation of the Solar System
- Geologic History of Earth
- Seafloor Spreading

SCIENCE

- Life Science
 - Cell Anatomy and Function
 - Body Systems
 - Sensory Receptors
 - Photosynthesis
 - Energy Flow in Organisms
 - Matter and Energy in Food Webs
 - Organism Interaction, Competition and Predation in Ecosystems
 - Ecosystem Changes in Biodiversity
 - Reproduction and Variation
 - Reproduction in Plants and Animals
 - Growth of Plants
 - Gene and Gene Mutations
 - Genetic Variation
 - Inheritance
- Physical Science
 - Structure of Matter
 - Chemical Properties and Interactions
 - Changes in Energy at the Molecular Level
 - Energy Transfer in Temperature
 - Characteristics of Chemical Reactions
 - Modeling Conservation of Matter
 - Energy in Chemical Reactions
 - Kinetic and Potential Energy
 - Thermal Energy Transfer
 - Heat and Matter
 - Energy Transfer in Motion
- Earth and Space
 - Patterns of Motion

TEXTS

- Guidebook to Better English, Phoenix Learning, Level 4
- Vocabulary Workshop, Sadlier, Level C
- Counterpoint in Literature, Scott Foresman
- Novels
 - *Red Badge of Courage*
 - *Animal Farm*
 - *A Separate Peace*
 - *Death Be Not Proud*
- Counterpoint – Anthology used for short stories/poetry
- Prentice Hall, Science Explorer, Human Biology and Health
- Prentice Hall, Integrated Science Laboratory Manual
- STEMScopes – created by RICE University to provide integrated science, technology, engineering, and math lessons. Activities included
 - Writing
 - Reading
 - Math
 - social studies
 - science lesson
- Teacher Created Resources – Differentiated Lessons and Assessments