

## Grade 8 Curriculum

### Mathematics

#### Pre-Algebra

Text – *Big Ideas Math – Course 3*

- Integers
- Algebraic Expressions
- Solving One-Step Equations & Inequalities
- Decimals & Equations
- Factors
- Fractions
- Exponents and Scientific Notations
- Operations Using Fractions with Variables
- Ratios/Proportions/Percent
- Solving Multi-Step Equations & Inequalities
- Data Analysis & Displays
- Problem Solving
- Linear Functions & Graphing
- Geometry

or

#### Algebra I (High School Algebra) – 2 Levels

Text – *Big Ideas Math – Algebra I*

- Solving Absolute Values, Equations, & Inequalities
- Real Numbers (Addition, Subtraction, Multiplication, & Division)
- Transforming Equations
- Solving Problems (Using Equations, Charts, & Formulas)
- Polynomials (Addition, Subtraction, Multiplication, & Division)
- Factoring Polynomials
- Algebraic Fractions (Addition, Subtraction, Multiplication, & Division)
- Identifying Sequences as Arithmetic, Geometric, or Recursively Defined
- Solving & Graphing Linear Equations
- Identifying Domain & Range of Linear & Nonlinear Functions

### Language Arts

Texts – Prentice Hall: *Prentice Hall Literature*; Holt, Rinehart & Winston: *Elements of Language*; Sadlier-Oxford: *Vocabulary Workshop*

#### Writing:

- Essays – Expository, Informational, Persuasive
- Friendly/Business Letters
- Narratives
- Creative Writing

### Language Arts – Writing (cont'd)

- Poetry
- International Day Project w/Research Paper
- Journaling

#### Literature:

- Short Story
- Nonfiction
- Fiction
- Novels
- Poetry
- Drama

#### Grammar:

- Oral Language
- Usage:
  - Agreement
  - Correct verb, pronoun, and modifier use
- Mechanics:
  - Capitalization
  - Punctuation
  - Common Errors

#### Vocabulary:

- Content Clues
- Word Structure
- Word Origins
- Multiple Meanings
- Writing Narratives Using Vocabulary Words

### Science

Text – Pearson: *Physical Science*

- Models in Science
- Measurement
- Matter – Changes of State; Behavior of Fluids
- Atomic Structure
- Periodic Table of Elements
- Chemistry – Substances & Reactivity, Elements, Compounds, Solutions, Acids, Bases, & Salts
- Energy & Energy Resources
- Electricity
- Magnetism
- Simple Machines
- Bridges
- Sound
- Motion, Force



## Health

- Human Growth & Development
- Mental & Emotional Health – Mind/Body Relationship in Health & Disease
- Substance Abuse & Making Healthy Choices
- Physical Health/Types of Exercise
- Nutrition & Eating Disorders
- Accessing & Evaluating Health Information

## U.S. History

Text – Prentice Hall: American Nation – *Civil War to Present*

- Reconstruction Era
- Industrialization of U.S. Effects on Economy
- Modern U.S.: Changes in Foreign/Social Policy
- World War I
- 1920's
- Great Depression
- World War II
- Civil Rights Era

## World Geography

Text – Pearson: *My World – World Geography*

- International Day Project
- Identify Different Map Projections
- Create, Use, and Interpret Databases, Charts, Tables
- Describe & Explain Current Events in Different Regions
- Analyze Different Cultures
- Examine the Relationship Between Different Countries
- Europe & Asia

## Religion

Texts – Loyola Press: *Christ Our Life*; Benziger: *Family Life*

- Church & Church History (Beginning with the Resurrection)
- Church Doctrine with Emphasis on the Creeds
- Liturgy & Sacraments
- Morality & the Family Life Program
- Catholic Social Teaching
- Community Service/Christian Witness (Term Projects)
- Prayer
- Scripture (Focus on the Acts of the Apostles)

## Specials

- Art
- Music
- Technology
- STREAM
- Library
- Spanish

Text – McDougal: *Avancemos*

- Engage in Conversation
- Provide & Obtain Information
- Understand Basic Grammar
- Use Present Tense of Verbs
- Develop Listening Skills
- Develop & Practice Writing & Reading Skills
- Describe Basic Spanish Traditions
- Physical Education