

Grade 8

Religion:

Students will:

- Study of the origins and purpose of the Church
- Survey of the Church from the post-apostolic era to the present
- Examine the mission of the Church
- Explore the meaning and mystery of the Church in the modern world
- Appreciate the dignity and sacredness of human life

Literature:

Students will:

- Analyze various genres and purposes
- Relate the relevance of the literary experience to personal experience
- Identify and interpret different forms of poetry
- Analyze author's position and critique ideas

Language Arts

Students will learn:

Sentences:

- Restructuring poorly written sentences

Parts of Speech:

- Verbs
- Clauses

Punctuation:

- Direct and indirect quotations
- Review of all with an emphasis on editing written work

Composition:

- 4-5 paragraph papers that include examples, reasons, compare and contrast, cause and effect, and explanations
- Research reports that include documentation
- To show a use of good vocabulary increased by the use of a thesaurus

Grade 8

- Writing shows a good understanding of mood, tone, figurative language, and the story structure
- Poetry – to continue to understand the vocabulary of poems and to use it in well-written poems

Algebra

Students will:

Real Numbers

- Be introduced to all appropriate vocabulary
- Perform arithmetic operations and use exponents, following the hierarchy for order of operations
- Identify and apply properties – commutative, associative distributive, identity and inverse
- Concept of absolute value and how it applies to graphing
- Simplifying integers, rationals, and radicals

Algebraic Expressions

- Be introduced to and use appropriate vocabulary
- Evaluate expressions and formulas
- Simplify expressions using order of operations
- Apply all arithmetic operations to algebraic equations in order to solve
- Translate verbal phrases to algebraic expressions and vice versa
- Translate verbal phrases of word problems to equations to solve linear equations
- Solve any one variable linear equation using the properties of equality
- Translate word statements to equations and the reverse
- Solve any one variable linear equation involving the absolute value of a variable

Inequalities

- Be introduced to and use all appropriate vocabulary
- Solve any one variable linear inequality using the properties of inequalities
- Translate word statements to inequalities and the reverse
- Solve any one variable compound inequality using the properties of inequalities

Grade 8

Polynomials

- Be introduced to and use all appropriate Vocabulary associated with polynomials
- Perform all four operations with polynomials
- Factoring of polynomials

Graphing

- Be introduced and use appropriate vocabulary
- Plot points on the coordinate plane
- Graph the solution set of any one variable linear equation
- Graph the solution set of any one variable linear equality
- Graph the solution set of any one variable linear equation or inequality involving absolute value

Social Studies

History

- Understand and discuss the causes of the Civil War
- Describe and explain the goals of the Civil War and the opposing viewpoints
- Investigate significant battles, events, and people of the Civil War
- Understand how to evaluate reliable resources, using primary source documents to analyze historical events and people
- Develop analytical skills using political cartoons, photos and illustrations by summarizing, drawing conclusions and making inferences, and comparing and contrasting
- Discuss the impact of Reconstruction on the South
- Examine the cause and effect of European immigration in the 1800's
- Investigate the events and people of World War I and World War II
- Evaluate and discuss the events that led to the Cold War
- Discuss the Progressive Era and Reform movements
- Use reading skills to extrapolate information and draw conclusions, being able to present evidence and cite it to support opinions

Economics

- Understand the economic and political causes that led to the Great Depression
- Examine factors that lead to economic growth over time
- Understand the causes of the stock market crash

Grade 8

- Compare and contrast recessions and depressions
- Discuss the impact technology has on our global economy

Geography

- Study map elements including longitude and latitude to understand absolute and relative location
- Examine the differences between region types, such as climate, geographical, cultural regions
- Discuss and understand current event issues in relation to past events
- Use daily geography skills to practice interpreting maps and mapping skills

Civics and Government

- Describe and analyze the changes in our government over time, including issues relevant to today
- Evaluate the political process and the importance of involvement
- Understand the roles of individual leaders in government, local, state and federal

Science

Physical Science, which is composed of a half a year of Chemistry and the other half of Physics. Emphasis continues on hands-on learning with more independent research required:

- Design and conduct scientific investigations using the scientific method
- Use appropriate tools and techniques to gather, analyze, and interpret data
- Develop descriptions, explanations, predictions, and models using evidence
- Apply critical thinking skills to relate evidence and explanations
- Communicate scientific procedures and explanations
- Use SI units of measurements and appropriate math skills in scientific inquiry
- Read and construct data tables and graphs
- Further develop content area reading skills

Chemistry:

- Identify atoms as the smallest parts of elements
- Identify the subatomic particles and their charges
- Compare and contrast elements, compounds, and mixtures

Grade 8

- Differentiate and compare the particles motion of solids, liquids, and gases
- Relate changes of state to changes in particle motion
- Explore the periodic table of elements
- Compare and contrast ionic and covalent bonds
- Observe and describe chemical reactions
- Describe the properties of acids and bases

Physics:

- Define and calculate speed, velocity, and acceleration
- Describe the relationships between forces and motions
- Describe and give examples of Newton's Laws
- Compare and contrast friction and gravity
- Examine pressure, density, and buoyancy
- Explore work and simple machines
- Understand the balance of forces in bridge designing
- Understanding the forces acting on geometric shapes