

# Mt. Calvary Lutheran School

## 8<sup>th</sup> Grade Curriculum

### RELIGION

**Overview:** difference between Law and Gospel; the church year cycle; the importance of Martin Luther to the church and the world; God's gift of prayer; comparison of the four Gospels; the passion of Christ; the students' faith; study of a variety of Old and New Testament stories

**Memory:** weekly based on Bible verses from each religion unit

**Worship:** attend chapel weekly; present one chapel and Advent service each year

### MATH/ALGEBRA I

**Arithmetic:** review operations with whole numbers, decimals, fractions

**Graphs:** graph linear equations by substitution and slope/intercept formula, graph circles, ellipses, hyperbolas, parabolas

**Sets:** understand set membership, represent subsets for real numbers symbolically

**Real numbers:** perform operations with integers; perform operations with multiple symbols of inclusion; solve problems with proportions, percents, rates, exponents, roots

**Expressions:** simplify expressions with negative exponents, simplify radical expressions, simplify and factor polynomials; add, multiply and

divide polynomials; simplify complex fractions

**Equations:** solve conditional and equivalent equations; solve equations with negative coefficients; solve systems of equations by elimination and substitution; solve equations with subscripted variables

**Geometry:** find the distance between two points; identify and classify polygons; find lateral surface area, surface area, and volume of geometric solids; use Pythagorean Theorem to find side

### GEOMETRY (advanced class)

**Overview:** geometry foundation, logic and reasoning, construction, coordinate geometry, triangles: congruence and similarity, polygons, quadrilaterals, right triangles and trigonometry, circles, solids, transformations

### LITERATURE/LANGUAGE ARTS

**Literature:** read main genres (short story, drama, novel, poetry); identify and analyze story elements (plot, character, setting, point of view, theme); analyze character qualities, feelings, actions & motives and how they support a character's realism; understand drama techniques; understand poetry terminology and apply to poems

read; drama project and presentation

**Accelerated Reader:** motivational reading tool that increases comprehension and vocabulary

**Grammar:** understand and appropriately use the eight parts of speech; understand & appropriately use clauses and verbals; use correct punctuation and capitalization; diagram sentences; dictation; journaling; deliver a persuasive speech using power point

**Writing:** progresses through the stages of the writing process; writes in a variety of styles (narrative, descriptive, persuasive, expository –three essays & research paper); write essays containing introductions, supporting evidence/paragraphs, and conclusions; use varied sentence structures from simple to complex and varied sentence beginnings; MLA format



## Textbook Information

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### LITERATURE/LANGUAGE ARTS (Continued)

**Spelling:** words are grouped together according to common features such as sound, syllable pattern, spelling pattern, word part

**Vocabulary:** develop a school language vocabulary base in order to read with greater fluency; focus on context and learning how the words around the word relate to the meaning; words learned are commonly encountered in literature, content-area reading & textbooks and high-stake tests

### SCIENCE

**Physical Science:** properties of matter; solids, liquids, and gases, elements and the periodic table, atoms and bonding, chemical reactions, balancing chemical equations, acids, bases, and solutions, carbon chemistry, motion, forces, Newton's laws of motion, Pascal's Principle, Bernoulli's Principle, work and machines, thermal energy and heat, magnetism and electricity  
**Labs:** hands-on activities that incorporate the scientific method and lab safety, labs coincide with the unit of study and include a written lab report

### SOCIAL STUDIES

**Map Skills:** U.S. geography  
**Settling the Americas:** first Americans, European exploration, English colonization (Washington D.C./Williamsburg/Jamestown field trip)  
**Struggle for Independence:** American Revolution  
**Establishing the Constitution:** creating a federal government  
**Democracy:** Age of Jefferson 1800 – Age of Reform 1860

**Expansion, Division, Reunion and Growth:** Age of Expansion, Civil War, Reconstruction  
**American Government/Civics/Constitution**  
**Current/ Special Events**

### FOREIGN LANGUAGE

Web based program allowing students to speak and learn the language chosen which include Arabic, Chinese, Dutch, Farsi, French, German, Greek, Hebrew, Hindi, Irish, Italian, Japanese, Korean, Latin, Polish, Portuguese, Russian, Spanish, Swedish, Tagalog, Turkish, and Vietnamese

### ART

Video based program covering elements and principles of art and drawing developmentally and sequentially; studying the art of artists, other cultures, and historic periods; emphasis on motivation, self-expression and media exploration

### TECHNOLOGY

Blends computer-related learning activities into curriculum to have students acquire, organize, demonstrate, and communicate information

### PHYSICAL EDUCATION

**Muscle stretching & strengthening exercises**  
**Sports & Activities:** basketball, volleyball, flag football, hockey, dodgeball, kickball, track and field

### RELIGION

*Holy Bible NIV*  
*Luther's Small Catechism*

### MATH

*Algebra I*  
Saxon Publishers  
Copyright 2003  
*Geometry*  
Saxon Publishing  
Copyright 2009

### LITERATURE/LANGUAGE ARTS

*Enjoying Literature*  
Macmillan  
Copyright 1985

*Diary of Anne Frank*  
*Romeo and Juliet*

*Grammar and Writing 8*  
Hake Publishing  
Copyright 2011

*Spelling Connections*  
Zaner-Bloser  
Copyright 2007

*Wordly Wise 3000 Book 8*  
School Specialty, Inc.  
Copyright 2012

### SCIENCE

*Physical Science*  
Prentice Hall  
Copyright 2007

### SOCIAL STUDIES

*A More Perfect Union*  
Houghton Mifflin  
Copyright 2009