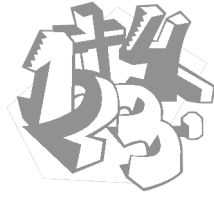


# Math

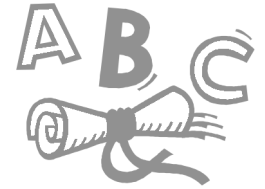


Trinity Lutheran School believes that math is an integral part of our daily lives. We study math to better understand order and pattern within God's creation. The teaching of math from a Christian perspective allows us to use and strengthen the minds God gave us as we apply mathematical understanding toward daily living.

The eighth grade student will:

- 1) Write and evaluate algebraic expressions
- 2) Solve equations using addition, subtraction, multiplication, and division
- 3) Add, subtract, multiply and divide integers, decimals and rational numbers
- 4) Graph points and lines on the coordinate plane
- 5) Solve and graph equations and inequalities with integers and rational numbers
- 6) Evaluate expressions with positive, negative and zero exponents and scientific notation
- 7) Write rational numbers in equivalent forms
- 8) Estimate and find square roots
- 9) Classify numbers as real, rational, irrational, integer, whole, and natural
- 10) Organize and interpret data in tables, stem-and-leaf plots, bar graphs, histograms, line graphs and scatter plots
- 11) Find appropriate measures of central tendency and variability
- 12) Classify, name and find angles of triangles, polygons, and quadrilaterals
- 13) Identify parallel and perpendicular lines and the angles formed by a transversal
- 14) Transform plane figures using translations, rotations, and reflections.
- 15) Identify symmetry in figures and verify tessellations
- 16) Find the perimeter and area of rectangles, parallelograms, triangles, trapezoids, circles (circumference)
- 17) Use the Pythagorean Theorem and its converse to solve problems.
- 18) Find the volume and surface area of prisms, cylinders, pyramids, cones, and spheres
- 19) Find equivalent ratios and solve proportions
- 20) Use ratios to create dilations and scale models of plane figures
- 21) Relate decimals, fractions, and percents
- 22) Solve problems using percent including increase and decrease, commission, sales tax, withholding tax and simple interest
- 23) Find permutations and combinations
- 24) Find the probability and odds of dependent and independent events

# Language Arts



Trinity Lutheran School believes that the Gospel is the message brought by the very Son of God, our Savior Jesus Christ, and is proclaimed, taught, and shared through words. Those words, God's very words, are preserved in the Bible, which is even called The Word. With God's Word as our foundation, we teach reading, writing, speaking and listening through a variety of oral and written works to equip our students for communication in their daily lives.

The eighth grade student will:

- 1) Read and classify various genres in literature: fiction, nonfiction, poetry, drama
- 2) Identify main idea and supporting details
- 3) Plot story elements: protagonist, antagonist, setting, conflict, rising action, climax, falling action, resolution, theme
- 4) Identify and define a range of literary techniques: alliteration, assonance, characterization, flashback, foreshadowing, personification, metaphor/simile, onomatopoeia, etc.
- 5) Apply interpretive thinking skills: cause/effect, compare/contrast, fact/opinion, etc.
- 6) Develop vocabulary using assorted strategies
- 7) Read at a rate of 190-220 words per minute with 85% comprehension
- 8) Apply the Six-Traits of Writing: Ideas/Content, Organization, Voice, Word Choice, Sentence Fluency, Conventions
- 9) Write for a designated purpose: descriptive, informative, narrative, persuasive
- 10) Write compositions with an introduction, body, conclusion
- 11) Utilize a range of resources and reference materials to access research information
- 12) Take notes, summarize, and organize information in preparation to compose
- 13) Edit for correct conventions of writing: capitalization, grammar, punctuation, spelling
- 14) Cite references appropriately
- 15) Identify and construct four basic sentence types
- 16) Identify and construct complete simple and compound sentences
- 17) Identify complete, simple, compound subjects and predicates
- 18) Define and use parts of speech: nouns, verbs, pronouns, adjectives, adverbs, prepositions, articles
- 19) Identify and use verbals: participles, gerunds, and infinitives
- 20) Use conventional spelling in written work
- 21) Spell eighth-grade weekly work lists correctly in student writing

# Social Studies



Trinity Lutheran School believes that God created the world and all people to live in harmony and cooperation with one another. We believe it is important for students to understand the physical, social, and historical aspects of the world while acknowledging and respecting people of all races and cultures, showing Christian citizenship and love. With God's Word as a guide, students are able to meet the challenges of the changing world.

The eighth grade student will:

- 1) Describe key individuals, events, ideas surrounding the American Revolution
- 2) Explain key ideas and reasons the U.S. wanted and was able to gain independence
- 3) Study and analyze the foundations of our government (Founding Fathers, Constitution, etc.)
- 4) Describe the growth and changes in the U.S. during the 1800's (Industrial Revolution, Transportation, Technologies, etc.)
- 5) Explain the key causes, events, and effects of the Civil War and Reconstruction
- 6) Study and analyze the changes in the U.S.: looking at the role of the U.S. through World War I and II and the Great Depression
- 7) Study and analyze the key social, economic and cultural developments from WWI through the Great Depression
- 8) Describe the purpose and function of the U.S. Constitution and the Bill of Rights
- 9) Explain the structures and functions of government at the federal, state, and local levels
- 10) Study law-making and election processes
- 11) Summarize rights and responsibilities as Christian citizens
- 12) Review and use skills for historical analysis (locating physical features, using primary sources, identifying key factors within an area, etc.)

"Challenging Young Minds, Nurturing Young Hearts"

Trinity Lutheran School

208 W. 13<sup>th</sup> Str.  
Grand Island, NE

## Grade 8

Parent Curriculum Guide

Trinity Lutheran School Mission

"Lift High the Cross of Jesus - Teaching and Caring for All"



# Science



Trinity Lutheran School believes that the Triune God has created and maintains His creation down to the last minute detail. Through Biblical teachings, students will understand that God created all things, and that all scientific information must be interpreted according to God's Word. The teaching of science from a Christian worldview is a necessary part of the curriculum.

The eighth grade student will:

- 1) Develop an understanding of change, constancy, and measurement
- 2) Develop the abilities needed to do scientific inquiry
- 3) Develop an understanding of technological design
- 4) Develop an understanding of the nature of science
- 5) Develop an understanding of properties and changes of properties in matter
- 6) Develop an understanding of motion and forces
- 7) Develop an understanding of the forms of energy and how energy is transferred
- 8) Investigate and describe the influence of gravity on objects in the solar system