EIGHTH GRADE BENCHMARKS

Eighth grade students are responsible, independent learners. Students are expected to apply foundational skills to increasingly complex content in each subject area. They deepen their understanding of Catholic faith and morality as well as world religions. They are encouraged to be role models by taking a leadership position in the student community and by serving their school and the community at large. The ultimate goal for eighth grade graduates is to transition to high school with spiritual, academic and personal confidence.

RELIGION

CREED

Students will:

- recognize major periods in the Bible and the history of the Catholic Church: Genesis-Exodus; New Testament period; Development of the early Church
- discuss the statements in the Apostles Creed and the Nicene Creed
- demonstrate an understanding of the terms "grace and salvation"
- demonstrate a deeper knowledge of the Church as one, holy, catholic, and apostolic
- describe some of the key differences and similarities between the Roman Catholic Church and Protestant Churches
- demonstrate respect for the great religions of the world
- recognize and explain the role of Mary in the Church and in their lives
- identify the ways in which the Church as an institution communicates with the faithful through councils and encyclicals

SCRIPTURE

Students will:

- identify Sacred Scripture as God's revelation
- explain the significance of the Old Testament as it relates to the New Testament
- know that God reveals who He is through His creation, in His relationship with the Israelites (the chosen people), and most fully in Jesus
- demonstrate knowledge that the Bible reveals the Paschal Mystery and saving actions of Jesus Christ

PRAYER/WORSHIP

Students will:

- discuss the longing for God that is placed in the heart of every human being
- reflect on Scripture in personal prayer
- discuss how the Church nurtures their relationship with Jesus Christ within the Catholic community
- evaluate their practice of personal prayer and describe changes that would strengthen their prayer life
- show an understanding of the need for conscious participation in liturgy and other prayer experiences

CHRISTIAN LIVING

Students will:

- identify one's self as being a unique creation, made in God's image
- explain the importance of forming one's conscience according to the Word of God and the teaching of the Church
- describe the process of making a moral decision
- identify situations of social injustice and explain how they respond to them as disciples of Christ
- articulate a consistent Life Ethic from a Catholic perspective
- participate in and reflect on service activities, and explain how these activities helped them grow in faith

LANGUAGE ARTS

READING

Comprehension

Students will:

- read and understand grade-level appropriate fiction and nonfiction
- be able to connect and explain the essential ideas, arguments and perspectives of nonfiction material in textbooks and research sources
- be able to comprehend and analyze a variety of literary genres, including short stories, the novel, drama, and poetry
- learn the literary terms for the formal parts of a story and reference them in expository paragraphs and essays about the literature they read
- learn literary terms that enable them to formally discuss and evaluate the material they read, including direct and indirect characterization, and internal and external conflict

SPELLING

Students will:

- be responsible for correct spellings of grade-level words in their writing
- use frequently misused and confused words correctly in their writing
- spell and use new terminology in religion, science, history and literature correctly in their writing
- add to their knowledge of spelling and definitions of grade-level words

VOCABULARY

Students will:

- understand the basic background of the history of Greek and Latin roots in English
- add to their knowledge of basic Greek and Latin prefixes, root words and suffixes in English
- determine meanings of new words in context based on this knowledge
- understand the concept of related word families
- understand and use new vocabulary words in all subject areas correctly in their writing
- monitor texts for unknown words or words with nuanced meanings and take steps to define and use these words correctly

The eighth grade curriculum emphasizes the application of foundational skills in spelling and vocabulary. Students are responsible for correct spelling and vocabulary usage in their writing in all subject areas. Students will continue to build on their knowledge of Greek and Latin word meanings.

ADVANCED ALGEBRA

Students will:

- demonstrate closure of the operations of addition, subtraction, multiplication, division, and exponentiation with integers, rational and irrational [real numbers] and "order of operations"
- explain and utilize properties of real numbers [commutative, associative] under addition and multiplication. Explain and utilize the distributive property of multiplication
- recall basic polygonal and circular formulae for (1) area; (2) volume; and, (3) radius, diameter and circumference
- demonstrate how to represent "unknowns" with symbolic representation, form algebraic expressions and setup algebraic equations to solve rate, distance, time, ratio, mixture, direct and indirect relationships when provided a written description of a [practical] problem
- identify and manipulate similar terms of a one or two variable equation, and then simplify the expression [or solve the equation] for one variable or in terms of the second variable [two-variable equation]
- express or manipulate a linear relation until it is in the point-slope [$y = mX + b$] form, and then graph the function on a [Cartesian] coordinate plane. Explain how to calculate the "slope" and the "y-intercept" if provided two coordinate points
- explain mathematically how to determine if two lines are (a) parallel; (b) degenerate or (c) intersecting—by examining only their point-slope equations. Demonstrate how the value of the "slope" determines whether the line is (1) vertical; (2) horizontal; (3) asymptotic to either "x" or "y"; (4) leaning to right or left
- identify the domain and range of a mapping between two sets of real numbers; determine if the mapping is a "function" or a "relation"; and, graph [basic] one, two and three-degree functions, inequalities and absolute-value functions and relations on a coordinate plane
- manipulate [linear] inequalities or expressions, absolute values and simultaneous linear equations, solving them by (1) graphing; (2) linear transformations, or (3) substitution, or a combination of these methods. Explain what is meant by the (a) intersection of two lines; (b) the union of two inequalities or the (c) intersection of two inequalities
- demonstrate proficiency with [HP/CASIO] a scientific calculator: (1) how to calculate the mean, median, mode; a "scatter plot" and a "box-&-whiskers" plot of a sequence of data points [statistics]; (2) how to plot a function or relation of two variables; and, how to interpret what the "plot" describes [make general observations about whether the dependent variable is increasing or decreasing linearly or geometrically]
- demonstrate the ability to manipulate radicals and exponents utilizing commutative, associative, distributive properties
- recognize and be able to manipulate (1) monomials; (2) binomials; (3) trinomials and (4) quadratic equations by (a) combining terms; (b) recognizing common forms [sum, difference of perfect squares]; and, (c) recognizing degenerate or undefined expressions
- recognize and factor different numerical expressions, including (1) integers; (2) perfect square trinomical; (3) quadratic forms ["$aX^2 + bX + c$"]
- express written problems [ratio, proportion, mixture, investment, growth/decline] in quadratic equations and then solve them, using (1) completing the square; and (2) the quadratic equation

- manipulate (1) rational expressions; (2) rational terms within quadratics; and (3) mixed rationals, utilizing multiplication, division, associative, distributive and commutative properties and rules of exponents
- divide polynomials and solve polynomial equations with rational terms by (1) ‘synthetic division’; (2) factoring; and (3) inverse multiplication
- demonstrate [basic] familiarity with (1) the Pythagorean Theorem; (2) trigonometric functions Sin(x), Cos(x) and Tan(x)

SCIENCE

PHYSICAL

Students will:

- know how to define a position
- solve problems involving distance, time, and average speed
- know about forces and how they relate to a change in motion
- understand the structure of an atom
- know how to use the periodic table to identify elements
- classify different types of chemical reactions and understand the role heat plays in them
- understand the difference between chemical and physical changes
- calculate the density of objects

PHYSICAL EDUCATION

MOVEMENT SKILLS AND PATTERNS

Students will:

- perform multicultural dances
- demonstrate basic offensive and defensive skills and strategies in team physical activities
- apply locomotor, nonlocomotor, and manipulative skills to team physical activities

PHYSICAL FITNESS AND HEALTH

Students will:

- evaluate individual measures of physical fitness in relationship to patterns of physical activity
- participate in moderate to vigorous physical activity

SOCIAL DEVELOPMENT

Students will:

- abide by the decisions of the officials, accept the outcome of the game, and show appreciation toward participants
- organize and work cooperatively with a group to achieve the goals of the group
- identify the contributions of members of a group or team
- describe leadership roles and responsibilities in the context of team games and activities
- model support toward individuals of all ability levels and encourage others to be supportive and inclusive of all individuals

ART

ARTISTIC PERCEPTION

Students will:

- use artistic terms when describing the intent and content of works of art
- analyze and justify how their artistic choices contribute to the expressive quality of their own works of art

CREATIVE EXPRESSION

Students will:

- create an expressive abstract composition based on real objects
- select a medium to use to communicate a theme in a series of works of art

HISTORICAL AND CULTURAL CONTEXT

Students will:

- compare, contrast, and analyze styles of art from a variety of times and places in Western and non-Western cultures
- identify major works of art created by women and describe the impact of those works on society at that time

AESTHETIC VALUING

Students will:

- construct an interpretation of a work of art based on the form and content of the work
- develop and apply a set of criteria as individuals or in groups to assess and critique works of art

CONNECTION, RELATIONSHIPS, AND APPLICATIONS

Students will:

- create a painting, satirical drawing, or editorial cartoon that expresses personal opinions about current social or political events