OLGC School
2018-2019
Eighth GRADE First Quarter Goals

Subject: Literature

Teacher: Ms. Esther Amano

Catholic Schools of Hawaii (CSOH) Standards:

-Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

-Determine the theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.

-Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.

-Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.

Subject: Language Arts (Writing/ Spelling)

Teacher: Ms. Esther Amano

(CSOH) Standards:

-Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant text.

-Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

-Produce a clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

-With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.

-Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

-Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Subject: Math
(Whole Year Goals)

Teacher: Ms. Theresa Kuaimoku

(CSOH) Standards:

The Number System

8.NS.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.

8.NS.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the

value of expressions (e.g., π^2).

- Example: By truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.

Expressions and Equations

8.EE.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions.

- Example: $3^2 \times 3^{-5} = 1/3^3 = 1/27$.

8.EE.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.

8.EE.3 Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other.

- Example: Estimate the population of the United States as 3×10^8 and the population of the world as 7×10^9, and determine that the world population is more than 20 times larger.

8.EE.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading).

8.EE.4a Interpret scientific notation that has been generated by technology.

8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.

- Example: Compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.

8.EE.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.

8.EE.7 Solve linear equations in one variable.

8.EE.7a Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).

8.EE.7b Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.

8.EE8 Analyze and solve pairs of simultaneous linear equations.

8.EE8a Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.

8.EE8b Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection.

- Example: $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.

8.EE8c Solve real-world and mathematical problems leading to two linear equations in two variables.

- Example: Given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.

Functions

8.F.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.

8.F.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).

- Example: Given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.

8.F.3 Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear.

- Example: The function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.

8.F.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.

8.F.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

Geometry

8.G.1 Verify experimentally the properties of rotations, reflections, and translations:

8.G.1a Verify lines are taken to lines, and line segments to line segments of the same length.

8.G.1b Verify angles are taken to angles of the same measure.

8.G.1c Verify parallel lines are taken to parallel lines.

8.G.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.

8.G.3 Describe the effect of dilations, translations, rotations, and reflections on two dimensional figures using coordinates.

8.G.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.

8.G.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.

- Example: Arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.

8.G.6 Explain a proof of the Pythagorean Theorem and its converse.

8.G.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.

8.G.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.

8.G.9 Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.

8.G.10 Apply the area formula to complex figures in a real world context using rational numbers.

Statistics and Probability

8.SP.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.

8.SP.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.

8.SP.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept.

- Example: In a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.

8.SP.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables.

8th GRADE ALGEBRA I

Unit 1:

Relationships between Quantities and Reasoning with Equations

Quantities

N-Q.1 Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.

N-Q.2 Define appropriate quantities for the purpose of descriptive modeling.

N-Q.3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

Seeing Structure in Expressions

A-SSE.1 Interpret expressions that represent a quantity in terms of its context.

A-SSE.1a Interpret parts of an expression, such as terms, factors, and coefficients.

A-SSE.1b Interpret complicated expressions by viewing one or more of their parts as a single entity.

- Example: Interpret $P(1+r)^n$ as the product of P and a factor not depending on P.

Creating Equations

A-CED.1 Create equations and inequalities in one variable and use them to solve problems. *Include equations arising from linear and quadratic functions, and simple rational and exponential functions.*

A-CED.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

A-CED.3 Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context.

- Example: Represent inequalities describing nutritional and cost constraints on combinations of different foods.

A-CED.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.

- Example: Rearrange Ohm's law V = IR to highlight resistance R.

Reasoning with Equations and Inequalities

A-REI.1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.

A-REI.3 Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

Unit 2:
Linear and Exponential Functions

The Real Number System

N-RN.1 Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents.

- Example: we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5^{(1/3)3}$ to hold, so $(5^{1/3})^3$ must equal 5.

N-RN.2 Rewrite expressions involving radicals and rational exponents using the properties of exponents.

Reasoning with Equations and Inequalities

A-REI.5 Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.

A-REI.6 Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

A-REI.10 Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).

A-REI.11 Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.

A-REI.12 Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.

Functions

8.F.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.

8.F.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).

- Example: Given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.

8.F.3 Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear.

- Example: The function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.

Interpreting Functions

F-IF.1 Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. The graph of f is the graph of the equation $y = f(x)$.

F-IF.2 Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

F-IF.3 Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers.

- Example: The Fibonacci sequence is defined recursively by $f(0) = f(1) = 1, f(n+1) = f(n) + f(n-1)$ for $n \geq 1$.

8.F.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.

8.F.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

F-IF.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. *Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*

F-IF.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.

- Example: If the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.

F-IF.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.

F-IF.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.

F-IF.7a Graph linear and quadratic functions and show intercepts, maxima, and minima.

F-IF.7e Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.

F-IF.9 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).

- Example: Given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.

Building Functions

F.BF.1 Write a function that describes a relationship between two quantities.

F.BF.1a Determine an explicit expression, a recursive process, or steps for calculation from a context.

F.BF.1b Combine standard function types using arithmetic operations.

- Example: Build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.

F.BF.2 Write arithmetic and geometric sequences both recursively and with an explicit formula. Use them to model situations, and translate between the two forms.

F.BF.3 Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k\,f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. *Include recognizing even and odd functions from their graphs and algebraic expressions for them.*

Linear and Exponential Models

F-LE.1 Distinguish between situations that can be modeled with linear functions and with exponential functions.

F-LE.1a Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.

F-LE.1b Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.

F-LE.1c Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.

F-LE.2 Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).

F-LE.3 Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.

F-LE.5 Interpret the parameters in a linear or exponential function in terms of a context.

Unit 3:

Descriptive Statistics

Interpreting Categorical and Quantitative Data

S-ID.1 Represent data with plots on the real number line (dot plots, histograms, and box plots).

S-ID.2 Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.

S-ID.3 Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).

Statistics and Probability

8.SP.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.

8.SP.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.

8.SP.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept.

- Example: In a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.

8.SP.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables.

- Example: Collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?

Interpreting Categorical and Quantitative Data

S-ID.5	Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.
S-ID.6	Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.
S-ID.6a	Fit a function to the data; use functions fitted to data to solve problems in the context of the data. *Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.*
S-ID.6b	Informally assess the fit of a function by plotting and analyzing residuals.
S-ID.6c	Fit a linear function for a scatter plot that suggests a linear association.
S-ID.7	Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.
S-ID.8	Compute (using technology) and interpret the correlation coefficient of a linear fit.
S-ID.9	Distinguish between correlation and causation.

Unit 4:
Expressions and Equations

Seeing Structure in Expressions

A-SSE.1	Interpret expressions that represent a quantity in terms of its context.
A-SSE.1a	Interpret parts of an expression, such as terms, factors, and coefficients.
A-SSE.1b	Interpret complicated expressions by viewing one or more of their parts as a single entity. ▯ Example: interpret $P(1+r)^n$ as the product of P and a factor not depending on P.
A-SSE.2	Use the structure of an expression to identify ways to rewrite it. ▯ Example: See $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$.
A-SSE.3	Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.
A-SSE.3a	Factor a quadratic expression to reveal the zeros of the function it defines.
A-SSE.3b	Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.

A-SSE.3c Use the properties of exponents to transform expressions for exponential functions.

- Example: The expression 1.15^t can be rewritten as $(1.15^{1/12})^{12t} \approx 1.012^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.

Arithmetic with Polynomials and Rational Expressions

A-APR.1 Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

Creating Equations

A-CED.1 Create equations and inequalities in one variable and use them to solve problems. *Include equations arising from linear and quadratic functions, and simple rational and exponential functions.*

A-CED.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

A-CED.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.

- Example: Rearrange Ohm's law V = IR to highlight resistance R.

Reasoning with Equations and Inequalities

A-REI.4 Solve quadratic equations in one variable.

A-REI.4a Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x – p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.

A-REI.4b Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b.

A-REI.7 Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically.

- Example: Find the points of intersection between the line $y = –3x$ and the circle $x^2 + y^2 = 3$.

Unit 5:
Quadratic Functions and Modeling

The Real Number System

N-RN.3 Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.

Interpreting Functions

F-IF.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. *Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*

F-IF.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.

- Example: If the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.

F-IF.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.

F-IF.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.

F-IF.7a Graph linear and quadratic functions and show intercepts, maxima, and minima.

F-IF.7b Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.

F-IF.8 Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.

F-IF.8a Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.

F-IF.8b Use the properties of exponents to interpret expressions for exponential functions.

- Example: Identify percent rate of change in functions such as $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)^{12t}$, $y = (1.2)^{t/10}$, and classify them as representing exponential growth or decay.

F-IF.9 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).

- Example: Given a graph of one quadratic function and an algebraic expression for another, identify which has the larger maximum.

Building Functions

F.BF.1 Write a function that describes a relationship between two quantities.

F.BF.1a Determine an explicit expression, a recursive process, or steps for calculation from a context.

F.BF.1b Combine standard function types using arithmetic operations.

- Example: Build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.

F.BF.3 Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$, $k\,f(x)$, $f(kx)$, and $f(x + k)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. *Include recognizing even and odd functions from their graphs and algebraic expressions for them.* F.BF.4 Find inverse functions.

F.BF.4a Solve an equation of the form $f(x) = c$ for a simple function f that has an inverse and write an expression for the inverse.

- Example: $f(x) = 2x^3$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$.

Linear and Exponential Models

F-LE.3 Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.

Subject: Religion

Teacher: Mrs. Catherine Garnsey

CSOH Standards:

Bible and History of Salvation

1. Identify the authorship of Christian Scripture CCC#76, 102-05, 126
2. Describe the historical-cultural context for interpreting Scriptures in order to discern the meaning of Scripture in their own lives
3. Interpret the message of the Gospel as the Good News of Jesus CCC#127, 571
4. Explain the Christian Scriptures as a collection of books that tells the story of God and His people CCC#120-33

Church

1. Explain that Jesus formed a community of disciples (the church) to share in and continue God's saving presence CCC#425, 763-66
2. Describe how the Holy Spirit inspires and guides the Church CCC#737-39, 813, 852
3. Explain the Church as one, holy, catholic, and apostolic CCC#811-65
4. Identify and interpret the rituals and tradition of the Roman Catholic Church CCC#857-65, 1066-1205, 1667-76
5. Demonstrate that there are many ways to express one's faith within the Catholic Church CCC#832-35, 873
6. Examine how the Church is family CCC#1169, 759, 1655
7. Analyze how the Church is an institution with national and global communities CCC#832-35
8. Demonstrate that the Church is built on individual commitment CCC#791, 814, 1937
9. Chart the role of the various groups in the church: Pope, cardinals, bishops, priests, religious communities, etc. CCC#871-933
10. Compare and contrast the Roman Catholic Church in relationship to other Christian traditions

CCC#836-38

12. Explain the role of Mary in the Church CCC#963-72
13. Distinguish and explain the four functions of the Church: Body of Christ, Servant, Sacrament, and Institution CCC#96, 871-913
14. Identify the ways in which the Church as an institution communicates with the faithful through such means as councils and encyclicals #880-96
15. Summarize how the church began on Pentecost and how it grew through the efforts and sacrifices of the first apostles and those who made up the first Christian communities CCC#1076
Outline how the Church grew throughout the different periods of history and social development CCC#726, 830, 1076
Explain the importance of missionary work in the growth of the Church throughout history
Explain and evaluate the significance of the Second Vatican Council. CCC#884

Prayer:
Memorize and recite all required age appropriate prayers.
Experience various traditions of Catholic prayer forms such as the rosary, benediction, litanies, novenas, contemplative prayer, and meditation in order to appreciate the rich heritage of the ancient and living church. CCC#131-133

Prayers: Rosary, "The Apostles' and Nicene Creeds", "Memorare", "Hail, Holy Queen", "Angelus", "Magnificat"

Textbook: *Christ in the Liturgy*

DUE	ASSIGNMENTS	CATEGORY
Aug. 3 Fri.	Mass Re-cap (Due Fridays re: Thursday Mass)	Effort
Aug. 6-10 M-F	Chapt. 1 – *Discipleship for Today*	Lessons
Aug. 9 –Thurs.	Complete pg. 19 – Study for Chapter Quiz	Homework
Aug. 10 Fri	Journal Entries (Fridays - googledocs)	Classwork
Aug. 10 –Fri.	Mass Re-cap	Effort
Aug. 10 - Fri.	Quiz - Chapt 1	Quiz
Aug. 13-15 M-W	Week 2 *Assumption* – pg. 372	Lessons
Aug.15 – Wed	Journal Entries	Classwork
Aug. 15–Wed	Study & Memorize – "Hail, Holy Queen" "Magnificat" "Apostles' Creed" Complete Mass Re-cap	Homework
Aug. 20 - 24	Chapt. 2 – *The People of God*	Lessons
Aug. 20-Mon	Prayer Quiz – "Hail, Holy Queen" "Magnificat" "Apostles' Creed"	Quiz
Aug. 20–Mon	Mass Re-cap for Assumption	Effort
Aug. 23-Thurs	Study for Chapter Quiz – Complete pg. 31	Homework
Aug. 24 - Fri	Journal Entries	Classwork
Aug. 24-Fri	Mass Re-cap	Effort
Aug. 24-Fri	Quiz – Chapter 2	Quiz
Aug. 27 - Mon	*Image of God Artwork*	*Project*
Aug. 27-31-M-F	Chapt. 3 – *The Mystery of the Church*	Lessons
Aug. 30 - Thurs	Study for Chapter Quiz – Complete p. 43	Homework
Aug. 31 - Fri	Journal Entries	Classwork

Aug. 31 - Fri	Mass Re-cap	Effort
Aug. 31 - Fri	Quiz – Chapt. 3	Quiz
Sept. 4-7 – T-F	Chapt. 4 – *The Marks of the Church*	Lessons
Sept. 6 -Thur	Study for Chapter Quiz – Complete p.55 –	Homework
Sept. 7 - Fri	Journal Entries	Classwork
Sept. 7 - Fri	Rosary - Participation	Effort
Sept. 7 - Fri	Mass Re-cap	Effort
Sept. 7 - Fri	Quiz – Chapt. 4	Quiz
Sept. 7 - Fri	Chapt. 1-4 Review	Classwork
Sept. 7 – Fri	Study for Chapt 1-4 Test	Homework
Sept. 11 - Tues	Chapt 1-4 Test & "Hail, Holy Queen" "Magnificat" "The Apostles' Creed"	Unit 1 Test
Sept. 12-14 -W-F	Chapt. 5 – *People of Prayer*	Lessons
Sept. 13 -Thur	Study for Chapter Quiz – Complete p. 67	Homework
Sept. 14 –Fri	Journal Entries	Classwork
Sept. 14 -Fri	Mass Re-cap	Effort
Sept.14 - Fri	Quiz – Chapter 5 -	Quiz
Sept. 17-21 M-F	Chapt. 6 – *Prayer of the Church*	Lessons
Sept. 20 -Thurs	Study for Chapter & Prayer Quiz – Complete p.79 – Memorize "Memorare" "Angelus" "The Nicene Creed"	Homework
Sept. 20 – Fri	Journal Entries	Classwork
Sept. 21 - Fri	Mass Re-cap	Effort
Sept. 21 - Fri	Chapt.6 – Quiz & "Memorare" "Angelus" "The Nicene Creed"	Quiz
Sept. 24-28	Week 7 – *The History of Salvation*	Lessons
Sept. 27 - Thurs	Journal Entries	Classwork
Sept. 27 -Thur	Work on Timeline	Classwork
Sept. 28 - Fri	Work on Timeline	Classwork
Sept. 28 - Fri	Re-cap Mass	Effort
Oct. 1-3 M/T/W	Review Chapt. 1-6	Lessons
Oct. 2-3-T/W	Study for Unit 1 Test -p. 81-82	Homework
Oct. 4 - Thurs	Unit 1 Test & Prayers – "Hail, Holy Queen" "Memorare" "Angelus" "Magnificat" "The Apostles' Creed" "The Nicene Creed"	1st Quarter Test
Oct. 4 - Thurs	Journal Entries	Classwork
Oct. 4 - Thurs	*The History of Salvation Timeline*	*Project*
	Homework will also consist of: finishing classwork, defining vocabulary terms, locating and summarizing Scripture passages, memorizing prayers, studying for quizzes, tests, etc., as needed - Mon – Thurs.	Homework
	Pop Quizzes (oral or written) may be administered to assess student participation, contributions to class discussions, and knowledge of the material.	Pop Quizzes

	Resources for Home: **NEW THIS YEAR! Family Faith Formation** Family Faith Formation Sessions are opportunities for our students and their families to gather together for a meal and to participate in fun, faith-sharing activities designed to enrich our knowledge of our Catholic faith and traditions. Quarter 1 Sessions: Friday, Sept. 14 – 6:30 to 8:00pm – Parish Center OR Saturday, Sept. 15th – 6:15 to 8:00pm – (immediately following our School Mass at 5:00pm) – Parish Center	

Subject: Science

Teacher: Mrs. Sylvia Tsuda

CSOH Standards:

Understands the nature of scientific inquiry

- **Know that investigations involve systematic observations, carefully collected, relevant evidence, logical reasoning, and some imagination in developing hypothesis and explanations.**
- **Understand that questioning, response to criticism, and open communication are integral to the process of science, e.g.,**
  - Scientist often differ with one another about the interpretation of evidence or theory in areas where there is not a great deal of understanding;
  - Scientists acknowledge conflicting interpretations and work towards finding evidence that will resolve the disagreement
- **Designs and conducts a scientific investigations; e.g.,**
  - Formulates hypotheses, designs and executes investigations, interprets data, synthesizes evidence into explanations, proposes alternative explanations for observations**,** critiques explanations and procedures.
- **Knows that observations can be affected by bias, e.g.,**
  - Strong beliefs about what should happen in particular circumstances can prevent the detection of other results.
  - Uses appropriate tools and techniques to gather, analyze, and interpret scientific data
  - Establishes relationships based on evidence and logical argument-provides causes for effects.
  - Knows that scientific inquiry includes evaluating results of scientific investigations, experiments, observations, theoretical and mathematical models, and explanations propose by other scientists.
  - Knows possible outcomes of scientific investigations.

Engineering Design

- Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
- Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.

- Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.
- Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.

Subject: Social Studies

Teacher: Ms. Esther Amano

CSOH Standards:

-Understands issues regarding personal, political, and economic rights.

-Understands how Gross Domestic Product and inflation and deflation provide indications of the state of the economy.

-Understands the characteristics and uses of maps, globes, and other geographic tools and technologies.

-Knows the location of places, geographic features, and patterns of the environment.

-Understands the characteristics and uses of spatial organization of Earth's surface.

-Understands how the United States changed between the post-World War I years and the eve of the Great Depression.

-Understands the causes of the Great Depression and how it affected American society.

-Understands how the New Deal addressed the Great Depression, transformed American federalism, and initiated the welfare state.

Subject: IT

Teacher: Mr. Warren Cabading

CSOH Standards:

Competency Goal 1: *The learner will understand important issues of a technology-based society and will exhibit ethical behavior in the use of computer and other technologies.*

1.1 Model ethical behavior relating to security, privacy, passwords, and personal information
1.2 Demonstrate an understanding of copyright by citing sources of copyrighted materials in papers, projects, and multimedia presentation
1.3 Investigate occupations dependent on technology.

Competency Goal 2: *The learner will demonstrate knowledge and skills in the use of computer and other technologies.*

2.1 Create/modify and print a database report.

*Standards and assignments may change during the quarter.