BELVIDERE CLUSTER CURRICULUM MAP - Updated July 2019

SUBJECT: Math **GRADE: Algebra I**

PACING-->	UNIT #1 3 Weeks (SEPTEMBER)	UNIT #2 4 Weeks (SEPTEMBER/OCTOBER)	UNIT #3 3 Weeks (OCTOBER/NOVEMBER)	UNIT #4 4 Weeks (NOVEMBER/DECEMBER)
TOPIC/THEME AND OBJECTIVES	**Numbers, Operations, and Expressions/Reasoning with Equations** • Interpret the structure of expressions, create equations that describe numbers or relationships. • Use properties of rational and irrational numbers. • Classify numbers in the real number system. • Identify and combine like terms. • Evaluate an expression for given values. • Put terms in order by the degree of a variable.	**Graphing Linear Equations** Create equations that describe numbers or relationships. Represent and solve equations and inequalities graphically. Summarize, represent, and interpret data on two categorical and quantitative variables. Graph a line using intercepts. Graph horizontal and vertical lines. Calculate the slope of a line when given a graph, or two points. Describe how slope relates to horizontal and vertical lines. Write and graph the equation of a line using point-slope form. Write and graph the equation of a line using slope-intercept form. Determine if a proportional relationship exists between sets of points. Write and graph the equation of a line that has a proportional relationship. Write the equation of a line based on the given information. Solve problems using the equation of a line. Determine whether or not a scatter plot has a linear relationship. Draw the line of best fit to model the data in a scatter plot that has a linear relationship and use the line of best fit to solve problems.	**Systems of Equations** Create equations that describe numbers or relationships. Solve systems of equations Represent and solve equations and inequalities graphically Graph systems of linear equations to find a solution. Solve a system of equations by using substitution and elimination. Translate real world problem into a system.	**Solving and Graphing Linear Inequalities/Solving Absolute Value Equations & Inequalities** Create equations that describe numbers or relationships. Solve equations and inequalities in one variable. Represent and solve equations and inequalities graphically. Able to write an inequality. Solve one-step inequalities. Solve two-step and multiple step inequalities. Graph a single inequality on a number line. Solve compound inequalities and graph them on a number line. Explain the difference between disjunctions and conjunctions. Graph a linear inequality that contains two variables in a coordinate plane. Solve and graph a system of linear inequalities by graphing them in a coordinate plane. Create equations that describe numbers or relationships. Understand solving equations as a process of reasoning and explain the reasoning. Solve absolute value equations. Solve absolute value inequalities. Write an absolute value equation or inequality to model real-world problems.
ESSENTIAL QUESTIONS & ENDURING UNDERSTANDINGS	• What are the basic skills needed for Algebra I? • What are irrational numbers? • What are like terms and how to combine them. • Using substitution to evaluate an expression for a value. • How do we represent	• What is meant by the slope of a line, and how can knowing a line's slope help to graph a line and find parallel and perpendicular lines? • Slope (rate of change) • How to graph a line. • Know the different forms the	• How can real world situations be modeled by systems? How can solutions be found to a system? • The point at which lines intersect is the solution to the system with those lines.	• How can related values that are not equivalent be represented? • How do we solve for a variable in an inequality? • How do we graph a linear inequality in the coordinate plane? • How do we solve a system of

	unknown quantities? • How can the value of an unknown variable be found? • How to solve an equation in one variable. • How can an equation be solved for a variable in the equation.	equation a line can take • Intercepts of a line • Horizontal and Vertical lines • How to write the equation of a line given characteristics of the line. • Scatter plot • Line of Best Fit		linear inequalities? • The vocabulary associated with inequalities. • Steps used to solve inequalities. • The difference between and & or statements. • How do we represent unknown quantities? • How can the value of an unknown variable be found? • How to solve an absolute value equation in one variable. • How to solve an absolute value inequality in one variable.
STANDARDS	**A.SSE.A.1** **Interpret expressions that represent a quantity in terms of its context.** **N.RN.B.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.** **N.Q.A.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.** **A.CED.A.1** **Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear functions and quadratic functions, and simple rational and exponential functions.** **A.CED.A.4** **Rearrange formulas to**	**A.CED.A.2** **Create equations in two or more variables to represent relationships between quantities; Graph equations on coordinate axes with labels and scales.** **A.REI.D.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). [Focus on linear equations.]** **F.IF.C.7** **Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.** **S.ID.B.6** **Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.** S.ID.B.6a. Fit a function to the data (including the use of technology); 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.	**A.CED.A.2** **Create equations in two or more variables to represent relationships between quantities; Graph equations on coordinate axes with labels and scales.** **A.REI.C.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.C.6** **Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.** **A.REI.D.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.CED.A.2** **Create equations in two or more variables to represent relationships between quantities; Graph equations on coordinate axes with labels and scales.** **A.CED.A.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. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.** **A.REI.B.3** **Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.** **A.REI.D.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.** **A.CED.A.1** **Create equations and inequalities in one variable and use them to solve problems.**

	highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law V = IR to highlight resistance R. **A.REI.B.3** **Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.** **A.REI.A.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.** **F.BF.A.1** **Write a function that describes a relationship between two quantities.**	S.ID.B.6c. Fit a linear function for a scatter plot that suggests a linear association. **S.ID.C.7** **Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.**	**[Focus on linear equations.]**	**Include equations arising from linear functions and quadratic functions, and simple rational and exponential functions.** **A.CED.A.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. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.** **A.REI.A.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.B.3** **Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.**
INSTRUCTIONAL PROCEDURES	**Whole Group** **Individual** **Small Groups**	**Whole Group** **Individual** **Small Groups**	**Whole Group** **Individual** **Small Groups**	**Whole Group** **Individual** **Small Groups**
INSTRUCTIONAL AND SUPPLEMENTAL MATERIALS/ LEVELED TEXTS	**Materials** **Leveled Texts**	**Materials** **Leveled Texts**	**Materials** **Leveled Texts**	**Materials** **Leveled Texts**

ASSESSMENTS	**Formative** **Summative** **Benchmark** **Alternative**	**Formative** **Summative** **Benchmark** **Alternative**	**Formative** **Summative** **Benchmark** **Alternative**	**Formative** **Summative** **Benchmark** **Alternative**
ACCOMMODATIONS **(select all the apply, add more as necessary, delete those that do not apply)**	**Special Education** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before giving instruction/directions - Shortened assignments - Student working with an assigned partner - Teacher initiated weekly assignment sheet - Use open book, study guides, test prototypes - Choice of books or activities - Cubing activities - Exploration by interest - Flexible grouping - Goal setting with students - Jigsaw - Mini workshops to re-teach or	**Special Education** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before giving instruction/directions	**Special Education** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before giving instruction/directions	**Special Education** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before giving instruction/directions - Shortened assignments - Student working with an assigned partner - Teacher initiated weekly assignment sheet - Use open book, study guides, test prototypes - Choice of books or activities - Cubing activities - Exploration by interest - Flexible grouping - Goal setting with students - Jigsaw - Mini workshops to re-teach or extend skills Open-ended activities - Think-Pair-Share

	extend skills Open-ended activities - Think-Pair-Share - Reading buddies - Varied journal prompts - Varied supplemental materials **ELL** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate nonessential information Using videos, illustrations, pictures, and drawings to explain or clarify - allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slideshows, videos, etc.) to demonstrate student's learning - Allowing students to correct errors (looking for understanding) - Allowing the use of note cards or open-book during testing - Decreasing the amount of work presented or required - Having peers take notes or providing a copy of the teacher's notes - Modifying tests to reflect selected objectives - Providing study guides - Reducing or omitting lengthy outside reading assignments - Reducing the number of answer choices on a multiple choice test - Tutoring by peers - Using computer word processing spell check and grammar check features - Using true/false, matching, or fill in the blank tests in lieu of essay tests **At Risk** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate nonessential information allowing products (projects, timelines,	- Shortened assignments - Student working with an assigned partner - Teacher initiated weekly assignment sheet - Use open book, study guides, test prototypes - Choice of books or activities - Cubing activities - Exploration by interest - Flexible grouping - Goal setting with students - Jigsaw - Mini workshops to re-teach or extend skills Open-ended activities - Think-Pair-Share - Reading buddies - Varied journal prompts - Varied supplemental materials **ELL** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate nonessential information Using videos, illustrations, pictures, and drawings to explain or clarify - allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slideshows, videos, etc.) to demonstrate student's learning - Allowing students to correct errors (looking for	- Shortened assignments - Student working with an assigned partner - Teacher initiated weekly assignment sheet - Use open book, study guides, test prototypes - Choice of books or activities - Cubing activities - Exploration by interest - Flexible grouping - Goal setting with students - Jigsaw - Mini workshops to re-teach or extend skills Open-ended activities - Think-Pair-Share - Reading buddies - Varied journal prompts - Varied supplemental materials **ELL** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate nonessential information Using videos, illustrations, pictures, and drawings to explain or clarify - allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slideshows, videos, etc.) to demonstrate student's learning - Allowing students to correct errors (looking for	- Reading buddies - Varied journal prompts - Varied supplemental materials **ELL** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate nonessential information Using videos, illustrations, pictures, and drawings to explain or clarify - allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slideshows, videos, etc.) to demonstrate student's learning - Allowing students to correct errors (looking for understanding) - Allowing the use of note cards or open-book during testing - Decreasing the amount of work presented or required - Having peers take notes or providing a copy of the teacher's notes - Modifying tests to reflect selected objectives - Providing study guides - Reducing or omitting lengthy outside reading assignments - Reducing the number of answer choices on a multiple choice test - Tutoring by peers - Using computer word processing spell check and grammar check features - Using true/false, matching, or fill in the blank tests in lieu of essay tests **At Risk** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate nonessential information allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slideshows, videos, etc.) to demonstrate student's learning

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	materials **Gifted and Talented** - Alternative formative and summative assessments - Choice boards - Games and tournaments - Group investigations - Guided Reading - Independent research and projects Interest groups - Learning contracts - Leveled rubrics - Literature circles - Multiple intelligence options - Multiple texts - Personal agendas - Project-based learning - Problem-based learning - Stations/centers - Think-Tac-Toes - Tiered activities/assignments - Tiered products - Varying organizers for instructions **504** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written	select from given choices . - Allowing the use of note cards or open-book during testing - Collaborating (general education teacher and specialist) to modify vocabulary, omit or modify items to reflect objectives for the student, eliminate sections of the test, and determine how the grade will be determined prior to giving the test - decreasing the amount of work presented or required . - Having peers take notes or providing a copy of the teacher's notes - Marking students' correct and acceptable work, not the mistakes - Modifying tests to reflect selected objectives - Providing study guides - Reducing or omitting lengthy Outside reading assignments - Reducing the number of answer choices on a multiple choice test - Tutoring by peers - Using authentic assessments with real-life problem-solving - Using true/false, matching, or fill in the blank tests in lieu of essay tests - using videos, illustrations, pictures, and drawings to explain or clarify	select from given choices . - Allowing the use of note cards or open-book during testing - Collaborating (general education teacher and specialist) to modify vocabulary, omit or modify items to reflect objectives for the student, eliminate sections of the test, and determine how the grade will be determined prior to giving the test - decreasing the amount of work presented or required . - Having peers take notes or providing a copy of the teacher's notes - Marking students' correct and acceptable work, not the mistakes - Modifying tests to reflect selected objectives - Providing study guides - Reducing or omitting lengthy Outside reading assignments - Reducing the number of answer choices on a multiple choice test - Tutoring by peers - Using authentic assessments with real-life problem-solving - Using true/false, matching, or fill in the blank tests in lieu of essay tests - using videos, illustrations, pictures, and drawings to explain or clarify	projects Interest groups - Learning contracts - Leveled rubrics - Literature circles - Multiple intelligence options - Multiple texts - Personal agendas - Project-based learning - Problem-based learning - Stations/centers - Think-Tac-Toes - Tiered activities/assignments - Tiered products - Varying organizers for instructions **504** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before giving instruction/directions - Shortened assignments - Student working with an assigned partner - Seacher initiated weekly assignment sheet - Use open book, study guides, test prototypes - Choice of books or activities - Cubing activities - Exploration by interest

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INTERDISCIPLINARY CONNECTIONS **21ST CENTURY SKILLS/THEMES (P21.ORG)** **TECHNOLOGY INTEGRATION** **CAREER EDUCATION (NJDOE CTE Clusters)**	**Interdisciplinary Connections** **(select all the apply, add more as necessary, delete those that do not apply)** - English Language Arts - Mathematics - Science and Scientific Inquiry (Next Generation) - Social Studies, including American History, World History, Geography, Government and Civics, and Economics - Technology - Visual and Performing Arts - World languages **21st Century Skills/ Themes (select all the apply, add more as necessary, delete those that do not apply)** - Global Awareness - Financial, Economic, Business and Entrepreneurial Literacy - Civic Literacy - Health Literacy - Environmental Literacy - Creativity and Innovation - Critical Thinking - Problem Solving - Communication - Collaboration - Information Literacy - Media Literacy - ICT (Information, Communication and Technology) Literacy	**Interdisciplinary Connections (select all the apply, add more as necessary, delete those that do not apply)** - English Language Arts - Mathematics - Science and Scientific Inquiry (Next Generation) - Social Studies, including American History, World History, Geography, Government and Civics, and Economics - Technology - Visual and Performing Arts - World languages **21st Century Skills/ Themes (select all the apply, add more as necessary, delete those that do not apply)** - Global Awareness - Financial, Economic, Business and Entrepreneurial Literacy - Civic Literacy - Health Literacy	**Interdisciplinary Connections (select all the apply, add more as necessary, delete those that do not apply)** - English Language Arts - Mathematics - Science and Scientific Inquiry (Next Generation) - Social Studies, including American History, World History, Geography, Government and Civics, and Economics - Technology - Visual and Performing Arts - World languages **21st Century Skills/ Themes (select all the apply, add more as necessary, delete those that do not apply)** - Global Awareness - Financial, Economic, Business and Entrepreneurial Literacy - Civic Literacy	**Interdisciplinary Connections** **(select all the apply, add more as necessary, delete those that do not apply)** - English Language Arts - Mathematics - Science and Scientific Inquiry (Next Generation) - Social Studies, including American History, World History, Geography, Government and Civics, and Economics - Technology - Visual and Performing Arts - World languages **21st Century Skills/ Themes (select all the apply, add more as necessary, delete those that do not apply)** - Global Awareness - Financial, Economic, Business and Entrepreneurial Literacy - Civic Literacy - Health Literacy - Environmental Literacy - Creativity and Innovation - Critical Thinking - Problem Solving - Communication - Collaboration - Information Literacy - Media Literacy - ICT (Information, Communication and Technology) Literacy **Technology Integration** **Career Education (select all the**

	Technology Integration **Career Education (select all the apply, add more as necessary, delete those that do not apply)** - Agriculture, Food & Natural Resources - Architecture & Construction - Arts, A/V Technology & Communications - Business Management & Administration - Education & Training - Finance - Government & Public Administration - Health Science - Hospitality & Tourism - Human Services - Information Technology - Law, Public Safety, Corrections & Security - Manufacturing - Marketing - Science, Technology, Engineering & Mathematics (STEM) - Transportation, Distribution & Logistics	- Environmental Literacy - Creativity and Innovation - Critical Thinking - Problem Solving - Communication - Collaboration - Information Literacy - Media Literacy - ICT (Information, Communication and Technology) Literacy **Technology Integration** **Career Education (select all the apply, add more as necessary, delete those that do not apply)** - Agriculture, Food & Natural Resources - Architecture & Construction - Arts, A/V Technology & Communications - Business Management & Administration - Education & Training - Finance - Government & Public Administration - Health Science - Hospitality & Tourism - Human Services - Information Technology - Law, Public Safety, Corrections & Security - Manufacturing - Marketing - Science, Technology, Engineering & Mathematics (STEM) - Transportation, Distribution & Logistics	- Health Literacy - Environmental Literacy - Creativity and Innovation - Critical Thinking - Problem Solving - Communication - Collaboration - Information Literacy - Media Literacy - ICT (Information, Communication and Technology) Literacy **Technology Integration** **Career Education (select all the apply, add more as necessary, delete those that do not apply)** - Agriculture, Food & Natural Resources - Architecture & Construction - Arts, A/V Technology & Communications - Business Management & Administration - Education & Training - Finance - Government & Public Administration - Health Science - Hospitality & Tourism - Human Services - Information Technology - Law, Public Safety, Corrections & Security - Manufacturing - Marketing - Science, Technology, Engineering & Mathematics (STEM) - Transportation, Distribution & Logistics	**apply, add more as necessary, delete those that do not apply)** - Agriculture, Food & Natural Resources - Architecture & Construction - Arts, A/V Technology & Communications - Business Management & Administration - Education & Training - Finance - Government & Public Administration - Health Science - Hospitality & Tourism - Human Services - Information Technology - Law, Public Safety, Corrections & Security - Manufacturing - Marketing - Science, Technology, Engineering & Mathematics (STEM) - Transportation, Distribution & Logistics
PACING-->	**UNIT #5** **5 Weeks**	**UNIT #6** **6 Weeks**	**UNIT #7** **4 Weeks**	**UNIT #8** **5 Weeks**

	(JANUARY/FEBRUARY)	(FEBRUARY/MARCH)	(APRIL)	(MAY/JUNE)
TOPIC/THEME AND OBJECTIVES	**Relationships Between Quantities/Functions** Reason quantitatively and use units to solve problems. Convert a unit of measurement to a different unit. Convert rate of measurement to different rates. Pick the appropriate type of unit for a desired measurement. Construct a system of linear equations to model a given situation containing the same unit of measurement. Pick the appropriate level of accuracy for a given situation. Understand the concept of a function and the function notation. Interpret functions that arise in applications in terms of the context. Define a function and identify its domain and range. Evaluate functions. Write recursive and explicit formulas. Compare the rate of change of multiple representations of functions. Write a linear function after a given transformation. Determine the transformation(s) that occur between 2 linear functions.	**Exponential Functions/Polynomials** Interpret functions that arise in terms of the context. Analyze functions using different representations Construct and compare linear, quadratic, and exponential models and solve problems. Interpret expressions for functions in terms of the situation they model. Identify exponential relationships from a table, a graph, and an equation. Calculate growth rates and factors. Identify exponential decay. Simplify expressions using rules of exponents. Interpret the structure of expressions. Describe and identify monomials, polynomials, and degrees. Add and subtract polynomials. Multiply a polynomial by a monomial. Multiply two polynomials. Recognize and factor monomials out of a polynomial. Factor trinomials. Factor a polynomial with 4 terms using the grouping method.	**Quadratics** Interpret the structure of expressions Write expressions in equivalent forms to solve problems Understand the relationship between zeros and factors of polynomials. Interpret functions as they arise in applications in terms of context. Analyze functions using different representations. Identify the parts of quadratics. Calculate the axis of symmetry and vertex of a quadratic function when it is in standard form. Find the zeros of a quadratic function by graphing it in a coordinate plane. Solve quadratic equations using the zero product property. Solve quadratic equations and polynomials by factoring. Solve quadratic equations using square roots. Solve quadratic equations by completing the square. Identify the nature of the roots of a quadratic using the discriminant. Solve quadratic equations using the quadratic formula. Solve polynomial equations using u-substitution. Solve application problem using methods for solving quadratic equations.	**Non-Linear Functions/Data & Statistical Analysis** Interpret functions that arise in applications in terms of the context. Build a function that models a relationship between two quantities. Construct and compare linear, quadratic, and exponential models and solve problems. Interpret expressions for functions in terms of the situation they model. Identify the key features of a parabola. Graph a parabola when the equation is in standard form. Graph a quadratic function using intercept form. Graph a quadratic function using vertex form Solve application problems by writing a quadratic function in its desired form. Calculate the roots of a quadratic equation when it is in vertex form. Determine the transformations of a parabola from its parent function. Determine the equation of a new function after its parent function went through a transformation. Graphically analyze the behavior of non-linear functions. Compare key features of linear, quadratic, and exponential functions. Summarize, represent, and interpret data on a single count or measurement variable. Summarize, represent, and interpret data on two categorical and quantitative variables. Calculate the mean, mode, and median from a set of data. Calculate the lower extreme, upper extreme, lower quartile, and upper quartile from a set of data. Display data using frequency tables, histograms, stem-and-leaf plots, box-and-whisker plots, and frequency tables. Choose a data display.

				Explain why a graph is misleading.
ESSENTIAL QUESTIONS & ENDURING UNDERSTANDINGS	• How can you convert and estimate different units to solve real world problems? • Convert one unit of measure. • Convert multiple units of measure. • Picking the appropriate type of unit for measurement. • Picking the appropriate level of accuracy. • How do you use a formula to identify the terms of a sequence? • What are the multiple ways a function can be represented? • How do you write a linear function after a given transformation? • The definition of a function. • The difference between the domain and range. • Know how to evaluate functions. • How to generate explicit and recursive formulas. • Know how to find the rate of change.	• How do exponential functions differ from linear functions? • The difference between growth rate and a growth factor. • Know what exponential decay is. • How can factoring help to simplify a polynomial? • To add or subtract polynomials, only like terms can be combined. • To multiply polynomials, each term of the terms of one polynomial is multiplied to each term of the second polynomial. • Factoring is another way of rewriting a polynomial.	• How can factoring help to solve an equation? • In what ways can the zeros of a quadratic be found and can this help us find when an object is in free-fall? • The characteristics and properties of a graph of a quadratic (parabola) • What it means to solve a quadratic. • If the product of two factors is zero, one of the factors is zero. • The quadratic formula and the discriminant.	• What are the key features of a quadratic equation? How do you graph a quadratic function in standard form, vertex form, and intercept form? • The parts of a parabola. • Know how to graph a quadratic function. • How to determine and write the transformations of a parabola. • How to compare features of functions. • How can we represent a set of data in a way that tells a story? • Average is the center of the data and can be found with mean, median, and mode. • The way data is displayed can either support or refute a point.
STANDARDS	**N.Q.A.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.A.2** **Define appropriate quantities for the purpose of descriptive modeling.** **N.Q.A.3** **Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.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**	**F.IF.B.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. *[Focus on exponential functions]** **F.IF.B.5** **Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the**	**A.SSE.A.1** **Interpret expressions that represent a quantity in terms of its context.** **A.SSE.A.2** **Use the structure of an expression to identify ways to rewrite it.** **A.SSE.B.3** **Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.** **A.REI.B.4** **Solve quadratic equations in one variable.** **A.APR.B.3**	**F.IF.B.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. *[Focus on exponential functions]** **F.IF.B.5** **Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function h(n)**

	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. **F.IF.A.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.A.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.A.3** Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. For example, the Fibonacci sequence is defined recursively by f(0) = f(1) = 1, f(n+1) = f(n) + f(n-1) for n ≥ 1. **F.IF.B.5** **Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For 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.C.9** **Compare properties of two**	**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.B.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.C.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.C.8** **Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.** **F.IF.C.9** **Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).** **For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.** ***[Limit to linear and exponential]** **F.BF.A.1** **Write a function that describes a relationship between two quantities.** **F.LE.A.1**	**Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.** **F.IF.B.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.** ***[Focus on exponential functions]** **F.IF.B.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.C.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.C.8** **Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.**	**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.B.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.C.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.C.9** **Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).** **For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.** ***[Limit to linear and exponential]** **F.BF.A.1. Write a function that describes a relationship between two quantities.** 1a. Determine an explicit expression, a recursive process, or steps for calculation from a context. **F.BF.B.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**

	functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). **For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.** ***[Limit to linear and exponential]** **F.BF.A.1. Write a function that describes a relationship between two quantities.** 1a. Determine an explicit expression, a recursive process, or steps for calculation from a context. **F.BF.B.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.**	**Distinguish between situations that can be modeled with linear functions and with exponential functions.** **F.LE.A.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.** **A.SSE.A.2** **Use the structure of an expression to identify ways to rewrite it.** **A.SSE.B.3** **Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.** **A.APR.A.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.**		**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.LE.A.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.B.5** **Interpret the parameters in a linear or exponential function in terms of a context.** **S.ID.A.1** **Represent data with plots on the real number line (dot plots, histograms, and box plots).** **S.ID.A.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.A.3** **Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).** **S.ID.B.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.**

INSTRUCTIONAL PROCEDURES	**Whole Group** **Individual** **Small Groups**	**Whole Group** **Individual** **Small Groups**	**Whole Group** **Individual** **Small Groups**	**Whole Group** **Individual** **Small Groups**
INSTRUCTIONAL AND SUPPLEMENTAL MATERIALS/ LEVELED TEXTS	**Materials** **Leveled Texts**	**Materials** **Leveled Texts**	**Materials** **Leveled Texts**	**Materials** **Leveled Texts**
ASSESSMENTS	**Formative** **Summative** **Benchmark** **Alternative**	**Formative** **Summative** **Benchmark** **Alternative**	**Formative** **Summative** **Benchmark** **Alternative**	**Formative** **Summative** **Benchmark** **Alternative**
ACCOMMODATIONS **(select all the apply, add more as necessary, delete those that do not apply)**	**Special Education** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions	**Special Education** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory	**Special Education** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory	**Special Education** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory presentation

	- Multi-sensory presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before giving instruction/directions - Shortened assignments - Student working with an assigned partner - Teacher initiated weekly assignment sheet - Use open book, study guides, test prototypes - Choice of books or activities - Cubing activities - Exploration by interest - Flexible grouping - Goal setting with students - Jigsaw - Mini workshops to re-teach or extend skills Open-ended activities - Think-Pair-Share - Reading buddies - Varied journal prompts - Varied supplemental materials **ELL** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate nonessential information Using	- presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before giving instruction/directions - Shortened assignments - Student working with an assigned partner - Teacher initiated weekly assignment sheet - Use open book, study guides, test prototypes - Choice of books or activities - Cubing activities - Exploration by interest - Flexible grouping - Goal setting with students - Jigsaw - Mini workshops to re-teach or extend skills Open-ended activities - Think-Pair-Share - Reading buddies - Varied journal prompts - Varied supplemental materials **ELL** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate nonessential information Using videos, illustrations, pictures, and drawings to explain or clarify	- presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before giving instruction/directions - Shortened assignments - Student working with an assigned partner - Teacher initiated weekly assignment sheet - Use open book, study guides, test prototypes - Choice of books or activities - Cubing activities - Exploration by interest - Flexible grouping - Goal setting with students - Jigsaw - Mini workshops to re-teach or extend skills Open-ended activities - Think-Pair-Share - Reading buddies - Varied journal prompts - Varied supplemental materials **ELL** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate nonessential information Using videos, illustrations, pictures, and drawings to explain or clarify	- Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before giving instruction/directions - Shortened assignments - Student working with an assigned partner - Teacher initiated weekly assignment sheet - Use open book, study guides, test prototypes - Choice of books or activities - Cubing activities - Exploration by interest - Flexible grouping - Goal setting with students - Jigsaw - Mini workshops to re-teach or extend skills Open-ended activities - Think-Pair-Share - Reading buddies - Varied journal prompts - Varied supplemental materials **ELL** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate nonessential information Using videos, illustrations, pictures, and drawings to explain or clarify - allowing products (projects, timelines, demonstrations, models,

	videos, illustrations, pictures, and drawings to explain or clarify - allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slideshows, videos, etc.) to demonstrate student's learning - Allowing students to correct errors (looking for understanding) - Allowing the use of note cards or open-book during testing - Decreasing the amount of work presented or required - Having peers take notes or providing a copy of the teacher's notes - Modifying tests to reflect selected objectives - Providing study guides - Reducing or omitting lengthy outside reading assignments - Reducing the number of answer choices on a multiple choice test - Tutoring by peers - Using computer word processing spell check and grammar check features - Using true/false, matching, or fill in the blank tests in lieu of essay tests **At Risk**	- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slideshows, videos, etc.) to demonstrate student's learning - Allowing students to correct errors (looking for understanding) - Allowing the use of note cards or open-book during testing - Decreasing the amount of work presented or required - Having peers take notes or providing a copy of the teacher's notes - Modifying tests to reflect selected objectives - Providing study guides - Reducing or omitting lengthy outside reading assignments - Reducing the number of answer choices on a multiple choice test - Tutoring by peers - Using computer word processing spell check and grammar check features - Using true/false, matching, or fill in the blank tests in lieu of essay tests **At Risk** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate	- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slideshows, videos, etc.) to demonstrate student's learning - Allowing students to correct errors (looking for understanding) - Allowing the use of note cards or open-book during testing - Decreasing the amount of work presented or required - Having peers take notes or providing a copy of the teacher's notes - Modifying tests to reflect selected objectives - Providing study guides - Reducing or omitting lengthy outside reading assignments - Reducing the number of answer choices on a multiple choice test - Tutoring by peers - Using computer word processing spell check and grammar check features - Using true/false, matching, or fill in the blank tests in lieu of essay tests **At Risk** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate	drawings, dioramas, poster boards, charts, graphs, slideshows, videos, etc.) to demonstrate student's learning - Allowing students to correct errors (looking for understanding) - Allowing the use of note cards or open-book during testing - Decreasing the amount of work presented or required - Having peers take notes or providing a copy of the teacher's notes - Modifying tests to reflect selected objectives - Providing study guides - Reducing or omitting lengthy outside reading assignments - Reducing the number of answer choices on a multiple choice test - Tutoring by peers - Using computer word processing spell check and grammar check features - Using true/false, matching, or fill in the blank tests in lieu of essay tests **At Risk** - Allowing students to correct errors (looking for understanding) - Teaching key aspects of a topic Eliminate nonessential information allowing products (projects, timelines, demonstrations, models,

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	- Independent research and projects Interest groups - Learning contracts - Leveled rubrics - Literature circles - Multiple intelligence options - Multiple texts - Personal agendas - Project-based learning - Problem-based learning - Stations/centers - Think-Tac-Toes - Tiered activities/assignments - Tiered products - Varying organizers for instructions **504** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format	- Problem-based learning - Stations/centers - Think-Tac-Toes - Tiered activities/assignments - Tiered products - Varying organizers for instructions **504** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before	- Problem-based learning - Stations/centers - Think-Tac-Toes - Tiered activities/assignments - Tiered products - Varying organizers for instructions **504** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before	**504** - Printed copy of board work/notes provided - Additional time for skill mastery - Assistive technology - Behavior management plan - Center-Based Instruction - Check work frequently for understanding - Computer or electronic device utilization - Extended time on tests/ quizzes - Have student repeat directions to check for understanding - Highlighted text visual presentation - Modified assignment format - Modified test content - Modified test format - Modified test length - Multiple test sessions - Multi-sensory presentation - Preferential seating - Preview of content, concepts, and vocabulary - Reduced/shortened reading assignments - Reduced/shortened written assignments - Secure attention before giving instruction/directions - Shortened assignments - Student working with an assigned partner - Seacher initiated weekly assignment sheet - Use open book, study guides, test prototypes

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INSTRUCTIONAL AND SUPPLEMENTAL MATERIALS/ LEVELED TEXTS	**Materials** **Leveled Texts**	**Materials** **Leveled Texts**	**Materials** **Leveled Texts**	**Materials** **Leveled Texts**
INTERDISCIPLINARY CONNECTIONS	**Interdisciplinary Connections (select all**	**Interdisciplinary Connections (select all**	**Interdisciplinary Connections (select all**	**Interdisciplinary Connections (select all**

21ST CENTURY SKILLS/THEMES (P21.ORG) **TECHNOLOGY INTEGRATION** **CAREER EDUCATION (NJDOE CTE Clusters)**	**the apply, add more as necessary, delete those that do not apply)** - English Language Arts - Mathematics - Science and Scientific Inquiry (Next Generation) - Social Studies, including American History, World History, Geography, Government and Civics, and Economics - Technology - Visual and Performing Arts - World languages **21st Century Skills/ Themes (select all the apply, add more as necessary, delete those that do not apply)** - Global Awareness - Financial, Economic, Business and Entrepreneurial Literacy - Civic Literacy - Health Literacy - Environmental Literacy - Creativity and Innovation - Critical Thinking - Problem Solving - Communication - Collaboration - Information Literacy - Media Literacy - ICT (Information, Communication and Technology) Literacy	**the apply, add more as necessary, delete those that do not apply)** - English Language Arts - Mathematics - Science and Scientific Inquiry (Next Generation) - Social Studies, including American History, World History, Geography, Government and Civics, and Economics - Technology - Visual and Performing Arts - World languages **21st Century Skills/ Themes (select all the apply, add more as necessary, delete those that do not apply)** - Global Awareness - Financial, Economic, Business and Entrepreneurial Literacy - Civic Literacy - Health Literacy - Environmental Literacy - Creativity and Innovation - Critical Thinking - Problem Solving - Communication - Collaboration - Information Literacy - Media Literacy - ICT (Information, Communication and Technology) Literacy **Technology Integration** **Career Education (select all the apply, add more**	**the apply, add more as necessary, delete those that do not apply)** - English Language Arts - Mathematics - Science and Scientific Inquiry (Next Generation) - Social Studies, including American History, World History, Geography, Government and Civics, and Economics - Technology - Visual and Performing Arts - World languages **21st Century Skills/ Themes (select all the apply, add more as necessary, delete those that do not apply)** - Global Awareness - Financial, Economic, Business and Entrepreneurial Literacy - Civic Literacy - Health Literacy - Environmental Literacy - Creativity and Innovation - Critical Thinking - Problem Solving - Communication - Collaboration - Information Literacy - Media Literacy - ICT (Information, Communication and Technology) Literacy **Technology Integration** **Career Education (select**	**the apply, add more as necessary, delete those that do not apply)** - English Language Arts - Mathematics - Science and Scientific Inquiry (Next Generation) - Social Studies, including American History, World History, Geography, Government and Civics, and Economics - Technology - Visual and Performing Arts - World languages **21st Century Skills/ Themes (select all the apply, add more as necessary, delete those that do not apply)** - Global Awareness - Financial, Economic, Business and Entrepreneurial Literacy - Civic Literacy - Health Literacy - Environmental Literacy - Creativity and Innovation - Critical Thinking - Problem Solving - Communication - Collaboration - Information Literacy - Media Literacy - ICT (Information, Communication and Technology) Literacy **Technology Integration** **Career Education (select all the apply, add more as necessary, delete**

	Technology Integration Career Education (select all the apply, add more as necessary, delete those that do not apply) - Agriculture, Food & Natural Resources - Architecture & Construction - Arts, A/V Technology & Communications - Business Management & Administration - Education & Training - Finance - Government & Public Administration - Health Science - Hospitality & Tourism - Human Services - Information Technology - Law, Public Safety, Corrections & Security - Manufacturing - Marketing - Science, Technology, Engineering & Mathematics (STEM) - Transportation, Distribution & Logistics	**as necessary, delete those that do not apply)** - Agriculture, Food & Natural Resources - Architecture & Construction - Arts, A/V Technology & Communications - Business Management & Administration - Education & Training - Finance - Government & Public Administration - Health Science - Hospitality & Tourism - Human Services - Information Technology - Law, Public Safety, Corrections & Security - Manufacturing - Marketing - Science, Technology, Engineering & Mathematics (STEM) - Transportation, Distribution & Logistics	**all the apply, add more as necessary, delete those that do not apply)** - Agriculture, Food & Natural Resources - Architecture & Construction - Arts, A/V Technology & Communications - Business Management & Administration - Education & Training - Finance - Government & Public Administration - Health Science - Hospitality & Tourism - Human Services - Information Technology - Law, Public Safety, Corrections & Security - Manufacturing - Marketing - Science, Technology, Engineering & Mathematics (STEM) - Transportation, Distribution & Logistics	**those that do not apply)** - Agriculture, Food & Natural Resources - Architecture & Construction - Arts, A/V Technology & Communications - Business Management & Administration - Education & Training - Finance - Government & Public Administration - Health Science - Hospitality & Tourism - Human Services - Information Technology - Law, Public Safety, Corrections & Security - Manufacturing - Marketing - Science, Technology, Engineering & Mathematics (STEM) - Transportation, Distribution & Logistics