Mathematics Curriculum

Subject Area: Modified Math 2
CCSS Conceptual Category: Number and Quantity
CCSS Domain: The Real Number System (N-RN)
Show-Me Standards

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Extend the properties of exponents to rational exponents	1. apply the properties of exponents including order of operations to simplify expressions and solve equations.	MA 1 MA 5 1.10 2.1	Skill/Concept	1. Simplify an expression using the Power of a Power rule.	1. Simplify the expression $3x^6$ times $4x^5$. (SMP 1, 2)

Mathematics Curriculum

Subject Area: Modified Math 2
CCSS Conceptual Category: Number and Quantity
CCSS Domain: Quantities (N-Q)
Show-Me Standards

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Reason quantitatively and use units to solve problems	3. choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	MA 5 1.5	Skill/Concept	3. Decide whether a problem calls for a rough estimate, an approximation, or an exact answer.	3. The margin of error varies according to use and context. (SMP 1,2,4,5,6)

Mathematics Curriculum

Subject Area: Modified Math 2
CCSS Conceptual Category: Algebra
CCSS Domain: Seeing Structure in Expressions (A-SSE)

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Interpret the structure of expressions	1. interpret expressions that represent a quantity in terms of its context.★ a. interpret parts of an expression, such as terms, factors, and coefficients.	MA 1 3.1 MA 5 1.6	Strategic Thinking	1a. Identify and define terms, factors and coefficients in an algebraic expression.	1a. Students should be able to recognize and interpret the parts of an expression. (SMP 1,2,4,7)

Mathematics Curriculum

Subject Area: Modified Math 2
CCSS Conceptual Category: Algebra
CCSS Domain: Seeing Structure in Expressions (A-SSE)
Show-Me Standards

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Write expressions in equivalent forms to solve problems	3. choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.★	MA 1 3.1	Strategic Thinking	3. Given an expression, write equivalent forms of the expression using properties of real numbers.	3. Rewrite x+2 using the commutative law. (SMP 1,2,3,4,7)

Mathematics Curriculum

Subject Area: Modified Math 2

CCSS Conceptual Category: Algebra

CCSS Domain: Creating Equations (A-CED)

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Create equations that describe numbers of relationships	1. create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear functions. 2. graph equations on coordinate axes with labels and scales. 4. rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.	MA 1 1.6 MA 5 1.10	Skill/Concept	1. Create equations and inequalities representing real world scenarios. Compare linear equations. 2. Graph equations, using t-charts or by finding the intercept, involving two variables on a coordinate axes, labeling appropriately. 4.Solve given equations for specified variables.	1. Create equations and inequalities that arise when comparing the values of two different linear functions. 2. Using at least 3 coordinate pairs, graph 2x-4y=8. 4. In the distance equation D=RT rearrange the equation to solve for R. (SMP 1,2,4)

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Mathematics Curriculum

Subject Area: Modified Math 2
CCSS Conceptual Category: Algebra
CCSS Domain: Reasoning with Equations and Inequalities (A-REI)
Show-Me Standards

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Understand solving equations as a process of reasoning and explain the reasoning	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.	MA 1 MA 5 3.4	Skill/Concept	1. Correctly apply the properties of equalities in a multi step problem.	1. Explain why the equation x/3 +7/2 =5 has the same solutions as 2x+21=30. (SMP 1,3,6)

Mathematics Curriculum

Subject Area: Modified Math 2

CCSS Conceptual Category: Algebra

CCSS Domain: Reasoning with Equations and Inequalities (A-REI)

Show-Me Standards

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Solve equations and inequalities in one variable	3. solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.	MA 1 MA 5 3.4	Skill/Concept	3. Apply properties of equality to equations and inequalities for the purpose of solving.	3. Given P=2L+2W and L=5, P=40, solve for W. (SMP 1,2,6,7)

Mathematics Curriculum

Subject Area: Modified Math 2
CCSS Conceptual Category: Algebra
CCSS Domain: Reasoning with Equations and Inequalities (A-REI)
Show-Me Standards

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Represent and solve equations and inequalities graphically	10. understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, forming a line.	MA 3 1.5 1.8	Skill/Concept	10. Interpret a graph as a collection of infinite solutions (x, y).	10. Given 2x+3y=6 is the point (1,4) a solution? (SMP 4,5,6)

Mathematics Curriculum

Subject Area: Modified Math 2

CCSS Conceptual Category: Functions

CCSS Domain: Interpreting Functions (F-IF)

Show-Me Standards

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Analyze functions using different representations	7. graph linear functions and show intercepts.	MA 1 MA 5 1.4 1.8	Skill/Concept	7. Graph linear functions finding x and y-intercepts.	7a. Given y=2x -1 find the x and y-intercepts and graph. (SMP 4,5,6,7)

Mathematics Curriculum

Subject Area: Modified Math 2
CCSS Conceptual Category: Functions
CCSS Domain: Building Functions (F-BF)
Show-Me Standards

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Build new functions from existing functions	3. identify the effect on the graph of replacing f(x) by f(x) + k for specific values of k (both positive and negative)	MA 4 MA 5 1.6	Skill/Concept	3. Students understand the vertical translation for a function of linear graphs.	3. Given y=f(x). Graph y=f(x)+3. (SMP 1,2,4,5)

Mathematics Curriculum

Subject Area: Modified Math 2
CCSS Conceptual Category: Geometry
CCSS Domain: Geometric Measurement and Dimension (G-GMD)
Show-Me Standards

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Explain volume formulas and use them to solve problems	1. use appropriate formulas to find the perimeter of two-dimensional objects and circumference of circles. 2. use appropriate formulas to find the area of two-dimensional objects including circles. 3. use volume formulas for cylinders, rectangular solids, cones, and spheres to solve problems.	MA 4 3.2	Skill/Concept	1. Solve real world problems involving perimeter and circumference. 2. Solve real world problems involving area of two-dimensional objects. 3. Solve various volume problems of a variety of geometric figures including cylinders, rectangular solids, cones, and spheres.	1. A farmer needs to enclose his garden of dimensions 20ftx30ft. How much fencing should he buy? 2. How much carpeting should be purchased for a room that is 15ftx18ft? 3. Given the dimensions of a cylindrical tank of water and the necessary formulas, calculate the amount of water needed to fill the tank completely. (including units) (SMP 1,2,3,4,5)

Mathematics Curriculum

Subject Area: Modified Math 2
CCSS Conceptual Category: Statistics and Probability
CCSS Domain: Interpreting Categorical and Quantitative Data (S-ID)
Show-Me Standards

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Summarize, represent, and interpret data on a single count or measurement variable	1. represent data with plots on the real number line with dot plots. 2. use statistics appropriate to the shape of the data distribution to compare measures of central tendency. (mean, median, mode and range)	MA 3 1.8	Skill/Concept	1. Construct a dot plot that best represents a set of data. 2. Given a set of test scores, find the mean, median, mode and range.	1. Construct a dot plot for the set of data. 2. Given 89, 87, 56, 92 as test scores, find the mean, median, mode and range. (SMP 1,2,3,4,5,8)

Mathematics Curriculum

Subject Area: Modified Math 2
CCSS Conceptual Category: Statistics and Probability
CCSS Domain: Interpreting Categorical and Quantitative Data (S-ID)
Show-Me Standards

CCSS Cluster	Common Core Standard (D)=District Standard	Show Me Standards	DOK	Instructional Strategies Student Activities/Resources	Assessment
	The students will:				
Summarize, represent, and interpret data on a two categorical and quantitative variables	6. represent data on two quantitative variables on a scatter plot, and describe how the variables are related. .	MA 3 1.8	Skill/Concept	6. Provide data that will produce linear functions.	6. DESE: Linear Equation Unit Lesson 1 (SMP 1,2,4,5)