

# Mead School District Curriculum Map K-8

**Content Area: Math**

**Grade Level: 5th**

Overarching Enduring Understandings:

1. Data can be collected, organized, and analyzed in a variety of ways.
2. Connections exist between fractions, decimals, ratios, and percent.
3. Understanding of mathematical concepts can be demonstrated through manipulatives, algorithms, and verbal and written explanations.
4. Writing to explain mathematical thinking demonstrates understanding.

The curriculum map contains **content** Grade Level Expectations (from EALR 1) not **process** GLEs (from EALRs 2-5). The process GLEs are interwoven throughout the Math Trailblazers curriculum.

Time Frame or # of Days	<i>Strands</i>	Priority EALRs /GLEs	Materials/Resources	Assessment
<p><b>Unit 1 (8-12 days)</b></p> <p>*2 weeks in September</p>	<p>Number Sense</p> <p>Probability &amp; Statistics</p>	<p><b>1.4.1 Understand the likelihood (chance) of events occurring.</b></p> <p><b>1.4.3 Understand how different collection methods or different questions can affect the results.</b></p> <p><b>1.4.4 Understand and apply the mean of a set of data.</b></p> <p><b>1.4.5 Apply strategies to organize, display, and interpret data.</b></p> <p><u>CORE CONCEPTS</u>            Add/Subtract Facts            Finding Mean, Median, Mode            Collecting &amp; Interpreting Data            Reviewing Bar Graphs</p>	<p>Math Trailblazers</p> <p>*Need to supplement/extend graphing skills (specifically stem and leaf plots)</p> <p>FOSS Science - reinforce graphing skills during science activities</p>	<p><b>*REQUIRED*</b>  <b>Before Starting this Unit: Give the District Criterion Reference Test</b> (first week in September)</p> <p>(optional)  <b>Lesson 5: Revised Jocelyn's Wildflowers</b> (District will provide this to replace the existing Jocelyn's Wildflowers URG pg. 80)</p> <p>DPP's</p> <p>Formative Ongoing Classroom Assessment (FOCA)</p>

Learning Services Department - November 7, 2005

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Time Frame or # of Days	<i>Strands</i>	Priority EALRs /GLEs	Materials/Resources	Assessment
<p><b>Unit 2 (12-24 days)</b></p> <p>*Start last week in Sept, finish mid-October (before Curriculum Day)</p>	Algebraic Sense	<p><b>1.5.5 Understand apply a variety of strategies to evaluate expressions with division.</b></p> <p><u>CORE CONCEPTS</u>            Multiplication/Division Facts            Multiplication patterns (ending zeroes)</p>	Math Trailblazers	<p><b>*REQUIRED*</b>  <b>Lesson 2: Multiplication &amp; Division</b>  <b>Pretest/Posttest</b>            (District will provide this to use now as a pretest and use again as a posttest before spring conferences)</p> <p>DPP's</p> <p>FOCA</p>

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<p><b>Unit 3 (10-16 days)</b></p> <p>*Start in mid-October, finish end of Oct. or early November</p>	<p>Number Sense</p> <p>Measurement</p> <p>Geometric</p> <p>Probability</p> <p>Algebraic Sense</p>	<p><b>1.1.1 Understand the concepts of fractions and decimals.</b></p> <p><b>1.1.2 Understand the relative values of non-negative fractions or decimals.</b></p> <p><b>1.1.3 Understand and apply concepts of divisibility.</b></p> <p><b>1.1.5 Understand the meaning of addition and subtraction on non-negative decimals and fractions.</b></p> <p><b>1.1.6 Apply procedures of addition and subtraction on non-negative decimals and like-denominator fractions.</b></p> <p><b>1.1.8 Understand and apply estimation strategies to determine the reasonableness of answers in situations involving addition and subtraction on non-negative decimals and like-denominator fractions.</b></p> <p><b>1.2.3 Understand how measurement units of capacity, weight, and length are organized in the metric system.</b></p> <p><b>1.3.3 Apply understanding of the location of non-negative rational numbers on a positive number line.</b></p> <p><b>1.4.5 Apply strategies to organize, display, and interpret data.</b></p> <p><b>1.5.6 Apply strategies to solve equations that have division.</b></p>	<p>Math Trailblazers</p> <p>*Need to spend additional time on converting between mixed numbers and improper fractions</p> <p>*This MTB unit actually uses feet and yards, but 5<sup>th</sup> gr. needs to increase focus on metric.</p>	<p>(optional inclusion in portfolio) <b>Lesson 5: Quiz Time (URG pg. 304-306)</b></p> <p>(optional inclusion in portfolio) <b>Lesson #6: Distance vs. Time Lab</b></p> <p>DPP's</p> <p>FOCA</p>
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<b>Unit 3 Cont.</b>		<u>CONCEPTS</u> Equivalent Fractions Mixed and Improper Fractions Comparing & Ordering Fractions (Benchmarks) Finding and Expressing Ratios Constructing & Interpreting Line Graphs	FOSS Science - reinforce metric measurement whenever possible	
<b>Unit 4 (15-20 days)</b>  *Start early Nov., finish end of Nov.	Number Sense  Measurement   Geometric Sense  Probability & Statistics	<b>1.1.3 Understand and apply concepts of divisibility.</b> <b>1.2.4 Understand and apply systematic procedures to determine the areas of rectangles and right triangles.</b> <b>1.2.5 Understand and apply formulas to measure area of rectangles and right triangles.</b> <b>1.2.6 Understand and apply strategies to obtain reasonable estimates of angles, and area measurements for rectangles and triangles.</b> <b>1.3.1 Understand the properties of angles and polygons.</b> <b>1.4.3 Understand how different collection methods or different questions can affect the results.</b> <b>1.4.4 Understand and apply the mean of a set of data</b> <b>1.4.5 Apply strategies to organize, display &amp; interpret data.</b> <u>CONCEPTS</u> Finding Area of Irregular Shapes Division: Base-ten, estimating, paper & pencil, remainders Using 10% as Standard for Estimation Order of Operations	Math Trailblazers	<b>*REQUIRED*</b> <b>Before Conferences: Give Part #1 of the shortened version of the CRT</b>  (optional inclusion in portfolio) <b>Lesson 6: Spreading Out</b>  (optional) <b>Lesson 9: Mid-Term Test (URG pg. 442-447)</b>  DPP's  FOCA

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<p><b>Unit 5 (10-14 days)</b></p> <p>*Start end of Nov. or beginning of Dec., finish by Winter Break</p>	<p>Number Sense</p> <p>Measurement</p> <p>Probability &amp; Statistics</p>	<p><b>1.1.1 Understand the concepts of fractions.</b></p> <p><b>1.1.2 Understand the relative values of non-negative fractions.</b></p> <p><b>1.1.5 Understand the meaning of addition and subtraction on non-negative fractions.</b></p> <p><b>1.1.6 Apply procedures of addition and subtraction on non-negative decimals and like-denominator fractions.</b></p> <p><b>1.1.7 Understand and apply strategies and tools as appropriate to tasks involving addition and subtraction of non-negative, like-denominator fractions or decimals.</b></p> <p><b>1.2.3 Understand how measurement units of capacity, weight, and length are organized in the metric system.</b></p> <p><b>1.4.3 Understand how different collection methods or different questions can affect the results.</b></p> <p><b>1.4.4 Understand and apply the mean of a set of data</b></p> <p><b>1.4.5 Apply strategies to organize, display &amp; interpret data.</b></p> <p><u>CONCEPTS</u></p> <p>Connecting Fractions and Ratios</p> <p>Understanding Equivalent Fractions</p> <p>Comparing Fractions</p> <p>Adding/Subtracting Fractions with Common Denominators</p>	<p>Math Trailblazers</p> <p>*This MTB unit actually uses feet and yards, but 5<sup>th</sup> gr. needs to increase focus on metric.</p> <p>FOSS Science - reinforce metric measurement whenever possible</p>	<p>(optional inclusion in portfolio)</p> <p><b>Lesson 7: Fraction Follow-up (URG pg. 523-524)</b></p> <p>(optional)</p> <p><b>Lesson 8: Shannon's Trip to School (Student guide pg. 185)</b></p> <p>DPP's</p> <p>FOCA</p>

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<p><b>Unit 6 (8-12 days)</b></p> <p>*Start beginning of January, finish by mid- to late January</p>	<p>Measurement</p> <p>Geometric Sense</p>	<p><b>1.2.1 Understand the concept of angle measurement.</b></p> <p><b>1.2.2 Understand degrees (30°, 45°, 60°, and 90°) as units of measurement for angle.</b></p> <p><b>1.2.6 Understand and apply strategies to obtain reasonable estimates of angles, and area measurements for rectangles and triangles.</b></p> <p><b>1.3.1 Understand characteristics of angles, polygons and circles.</b></p> <p><b>1.3.2 Apply understanding to the properties of parallel and perpendicular and line symmetry to 2-dimensional shapes and figures.</b></p> <p><b>1.3.4 Apply understanding of translation (slides) or reflections (flips) to congruent figures.</b></p> <p>CONCEPTS            Acute, Obtuse, Right, and Straight Angles            Measuring Angles with a Protractor            Triangulation            Sums of Angles of Polygons</p>	<p>Math Trailblazers</p>	<p>(optional)  <b>Lesson 7: Slab Orders (URG pg. 619)</b></p> <p>DPP's</p> <p>FOCA</p>

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<p><b>Unit 8 (5-7 days)</b></p> <p>*Do this unit in mid-May, after the WASL</p> <p>(Do Mid-Year Test before President's Weekend)</p>	<p>Probability &amp; Statistics</p>	<p><b>1.4.3 Understand how different collection methods or different questions can affect the results.</b></p> <p><b>1.4.4 Understand and apply the mean of a set of data</b></p> <p><b>1.4.5 Apply strategies to organize, display &amp; interpret data.</b></p> <p>CONCEPTS This is an assessment unit designed to reinforce skills from units 1-7. No new skills are presented.</p>	<p>Math Trailblazers</p> <p>To carve out time for the WASL later in the spring, we are making the following part of this unit <b>mandatory</b>: Lesson 8: Mid-Year Test</p> <p>These lessons are <b>recommended</b>: Lesson 5 (Life Spans) and Lesson 6 (Comparing the Life Spans of Animals and Soap Bubbles)</p> <p>These lessons are <b>optional</b>: 1,2,3,4,7</p>	<p>(optional) <b>Mid-Year Test (URG pg. 812-816)</b></p> <p>DPP's</p> <p>FOCA</p>

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<p><b>Unit 9 (6-10 days)</b></p> <p>*Start after President's Weekend, finish mid-March</p>	<p>Algebraic Sense</p>	<p><b>1.5.5 Understand and apply a variety of strategies to evaluate expressions with division.</b>  <b>1.5.6 Apply strategies to solve equations that have division.</b></p> <p>CONCEPTS            Decimal Equivalents for Fractions            Division Strategies            Add/Subtract Fractions            Checking Multiplication with Division</p>	<p>Math Trailblazers</p>	<p><b>*REQUIRED*</b>  <b>Before Conferences:</b>  <b>Give Part #2 of the shortened version of the CRT AND the Multiplication &amp; Division Pretest/Posttest</b>            (District will provide this to use in Sept. as a pretest and use again now as a posttest before spring conferences)</p> <p>(optional)  <b>Lesson 6: Tiles (URG pg. 884-885)</b></p> <p>DPP's</p> <p>FOCA</p>

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<p><b>Unit 10 (10-13 days)</b></p> <p>*Start last week of April, finish after WASL</p>	<p>Geometric Sense</p> <p>Probability &amp; Statistics</p>	<p><b>1.3.1 Understand characteristics of angles, polygons and circles.</b></p> <p><b>1.3.2 Apply understanding to the properties of parallel and perpendicular and line symmetry to 2-dimensional shapes and figures.</b></p> <p><b>1.3.3 Apply understanding of the location of non-negative rational numbers on a positive number line.</b></p> <p><b>1.3.4 Apply understanding of translation (slides) or reflections (flips) to congruent figures.</b></p> <p><b>1.4.5 Apply strategies to organize, display, and interpret data.</b></p> <p>CONCEPTS Negative Numbers Slides &amp; Flips Plotting Cartesian Coordinates</p>	<p>Math Trailblazers</p>	<p>(optional inclusion in portfolio) <b>Lesson 8: Reading a Map (URG pg. 966-969)</b></p> <p>DPP's</p> <p>FOCA</p>

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<p><b>Unit 11 (11-13 days)</b></p> <p>*Start mid-March, finish during the week after Spring Break</p>	<p>Number Sense</p> <p>Probability &amp; Sense</p> <p>Algebraic Sense</p>	<p><b>1.1.5 Understand the meaning of addition and subtraction on non-negative decimals and fractions.</b></p> <p><b>1.1.6 Apply procedures of addition and subtraction on non-negative decimals and like-denominator fractions.</b></p> <p><b>1.1.8 Understand and apply estimation strategies to determine the reasonableness of answers in situations involving addition and subtraction on non-negative decimals and like-denominator fractions.</b></p> <p><b>1.4.5 Apply strategies to organize, display, and interpret data.</b></p> <ul style="list-style-type: none"> <li>• Use histograms, pictographs, and stem-and-leaf plots to display data.</li> </ul> <p><b>1.5.1 Understand patterns of objects, including relationships between two sets of numbers, based on a single arithmetic operation.</b></p> <p><b>1.5.2 Analyze a pattern to develop a rule describing the pattern, including combinations of two arithmetic operations.</b></p> <p>CONCEPTS  Prime and Composite Number  Prime Factorization, Factor Trees, Stating Prime Factorization as Exponents  Reducing Fractions to Lowest Terms  Square Numbers</p>	<p>MTB</p>	<p>(optional inclusion in portfolio)  <b>Lesson 6: Skills Check-up (URG pg. 1033)</b></p> <p>(optional)  <b>Lesson 7: A Further Look at Patterns &amp; Primes (URG pg. 1040-1041)</b></p> <p>(optional)  <b>Lesson 8: From Factors to Fractions (student Guide pg. 381)</b></p> <p>DPP's</p> <p>FOCA</p>

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<p><b>Unit 12 (8-10 days)</b></p> <p>*do modified unit in mid-April before WASL</p>	<p>Number Sense</p>	<p><b>1.1.1 Understand the concepts of fractions and decimals.</b></p> <p><b>1.1.2 Understand the relative values of non-negative fractions or decimals.</b></p> <p><b>1.1.8 Understand and apply estimation strategies to determine the reasonableness of answers in situations involving addition and subtraction on non-negative decimals and like-denominator fractions.</b></p> <p><b>1.1.3 Understand and apply concepts of divisibility.</b></p> <p><b>1.1.5 Understand the meaning of addition and subtraction on non-negative decimals and fractions.</b></p> <p><b>1.1.6 Apply procedures of addition and subtraction on non-negative decimals and like-denominator fractions.</b></p> <p><b>1.1.7 Understand and apply strategies and tools as appropriate to tasks involving addition and subtraction of non-negative, like-denominator fractions or decimals.</b></p> <p>CONCEPTS Add/Subtract Mixed Numerals Multiplying Fractions</p>	<p>MTB</p>	<p><b>*REQUIRED*</b> <b>Give Part #3 of the District Criterion Reference Test</b></p> <p>(optional) <b>Lesson 7: Pattern Block Candy (URG pg. 1108-1109)</b></p> <p>(optional) <b>Lesson 8: Party Problems (Student Guide pg. 400-401)</b></p> <p>DPP's</p> <p>FOCA</p> <p>WASL</p>

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