



<b>Fourth Grade Priority Areas</b>	
<b>Developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends (OA, NBT)</b>	Students generalize their understanding of place value to 1,000,000. They apply their understanding of models for multiplication/division, place value, properties of operations, and the relationship between multiplication and division as they develop, use efficient, and accurate methods to compute products of multi-digit whole numbers and quotients involving multi-digit dividends. They develop fluency with efficient procedures for multiplying whole numbers; understand and explain why the procedures work based on place value and properties of operations; and use them to solve problems. They apply appropriate methods to estimate and mentally calculate products and quotients, and interpret remainders based upon the context.
<b>Developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers (NF)</b>	Students develop understanding of fraction equivalence and operations with fractions. They recognize that two different fractions can be equal (e.g., $15/9 = 5/3$ ), and they develop methods for generating and recognizing equivalent fractions. Students extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number.
<b>Understanding that geometric figures can be analyzed and classified based on their properties, [i.e. parallel sides, perpendicular sides, angle measures, and symmetry] (G)</b>	Students describe, analyze, compare, and classify two-dimensional shapes. Through building, drawing, and analyzing two-dimensional shapes, students deepen their understanding of properties of two-dimensional objects and the use of them to solve problems involving symmetry.

<b>Mathematical Practice Standards</b>	
<ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Look for and express regularity in repeated reasoning.</li> </ol>	<ol style="list-style-type: none"> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Model with mathematics.</li> </ol>

<b>Content Standards</b>	
<b>Operations and Algebraic Thinking (OA)</b> <ul style="list-style-type: none"> <li>• Use the four operations with whole numbers to solve problems</li> <li>• Gain familiarity with factors and multiples</li> <li>• Generate and analyze patterns</li> </ul>	<b>Number and Operations—Fractions (NF)</b> <ul style="list-style-type: none"> <li>• Extend understanding of fraction equivalence and ordering for fractions ordering for fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100</li> <li>• Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers for fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100 • Understand decimal notation for fractions, and compare decimal fractions</li> </ul>
<b>Number and Operations in Base Ten (NBT)</b> <ul style="list-style-type: none"> <li>• Generalize place value understanding for multi-digit whole numbers less than or equal to 1,000,000</li> <li>• Use place value understanding and properties of operations to perform multi-digit arithmetic on whole numbers less than or equal to 1,000,000</li> </ul>	<b>Measurement and Data (MD)</b> <ul style="list-style-type: none"> <li>• Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit</li> <li>• Represent and interpret data</li> <li>• Geometric measurement: Understand concepts of angle and measure angles</li> </ul>
<b>Geometry (G)</b> <ul style="list-style-type: none"> <li>• Draw and identify lines and angles, and classify shapes by properties of their lines and angles</li> </ul>	

# Pentucket Regional School District

## Mathematics Curriculum Guide

## Grade 4



### PRSD Curriculum Tools and Resources - Grade 4

Eureka Module	Concept	Focus Standard	Focus Standard for Mathematical Practice
1	<b>Place Value, Rounding, and Algorithms for Addition and Subtraction</b>	Number and Operations in Base Ten 4.OA.3, 4.NBT.1, 4.NBT.2, 4.NBT.3, 4.NBT.4	MP.1 MP.2 MP.3 MP.5 MP.6
2	<b>Unit Conversions and Problem Solving with Metric Measurement</b>	Measurement and Data 4.MD.1, 4.MD.2	MP.1 MP.7 MP.8
3	<b>Multi-Digit Multiplication and Division</b>	Operations and Algebraic Thinking Number and Operations in Base Ten 4.OA.1, 4.OA.2, 4.OA.3, 4.OA.4, 4.NBT.5, 4.NBT.6, 4.MD.3	MP.2 MP.4 MP.5 MP.8
4	<b>Angle Measure and Plane Figures</b>	Measurement and Data Geometry 4.MD.5, 4.MD.6, 4.MD.7, 4.G.1, 4.G.2, 4.G.3	MP.2 MP.3 MP.5 MP.6
5	<b>Fraction Equivalence, Ordering, and Operations</b>	Number and Operations in Base Ten 4.OA.5, 4.NF.1, 4.NF.2, 4.NF.3, 4.NF.4, 4.MD.4	MP.2 MP.3 MP.4 MP.7
6	<b>Decimal Fractions</b>	Number and Operations in Base Ten 4.NF.5, 4.NF.6, 4.NF.7, 4.MD.2	MP.2 MP.4 MP.6 MP.8
7	<b>Exploring Measurement with Multiplication</b>	Operations and Algebraic Thinking Measurement and Data 4.OA.1, 4.OA.2, 4.OA.3, 4.MD.1, 4.MD.2	MP.2 MP.3 MP.7 MP.8



### A Multi-Tiered System of Support for Math (MTSS)

Pentucket's MTSS for Math is an instructional framework that includes universal screening of all students, multiple tiers of instruction and support services, and an integrated data collection and assessment system to inform decisions at each tier of instruction.



Tier 1 Instruction is the general education curriculum that is provided to all students. Math Instruction for Fourth Grade occurs in a 70 minute block with a combination of whole class and flexible small group instruction. Eureka Math instruction is comprised of four critical components.

**Fluency Practice:** Supports student development and provides opportunities to gain confidence and motivation for continued learning.

**Concept Development:** Addresses new content through discussion and reflection.

**Application Problem:** Provides students an opportunity to apply their skills and understanding in new ways.

**Student Debrief:** Students share thinking, draw conclusions, and complete an exit ticket.

Tier 2 and Tier 3 Instruction occurs in the 70 minutes of classroom time with focused flexible groups taught by the general education teachers, special education teachers, and Title 1 teachers but also may occur in additional time, beyond the 60 minutes in small group pull-out sessions or WIn Time. This instruction focuses on specific skills and needs that are behind and likely to hinder progress without focused intervention.

Benchmark assessments are given 3 times per year to help make decisions on which students need which type and level of intervention. Progress Monitoring data is regularly collected on students receiving interventions so school staff can measure its effectiveness and adjust as needed.