



<b>Fifth Grade Priority Areas</b>	
<b>Developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (NF)</b>	Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations with like denominators. They develop fluency in calculating sums and differences of fractions, and make reasonable estimates of them. Students also use the meaning of fractions, of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for multiplying and dividing fractions make sense.
<b>Extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations (NBT)</b>	Students develop understanding of why division procedures work based on the meaning of base-ten numerals and properties of operations. They finalize fluency with multi-digit multiplication, and division. They apply their understandings of models for decimals, decimal notation, and properties of operations to add and subtract decimals to hundredths. They develop fluency in these computations and make reasonable estimates of their results. Students use the relationship between decimals and fractions, as well as the relationship between finite decimals and whole numbers to understand and explain why the procedures for multiplying and dividing finite decimals make sense. They compute products and quotients of decimals to hundredths efficiently and accurately.
<b>Developing understanding of volume (MD)</b>	Students convert among different-sized measurement units within a given measurement system allowing for efficient and accurate problem solving with multi-step real-world problems as they progress in their understanding of scientific concepts and calculations. Students recognize volume as an attribute of three-dimensional space. They select appropriate units, strategies, and tools for solving problems that involve estimating and measuring volume.
<b>Solving problems using the coordinate plane (G)</b>	Students learn to interpret the components of a rectangular coordinate system as lines and understand the precision of location that these lines require. Students learn to apply their knowledge of number and length to the order and distance relationships of a coordinate grid and to coordinate this across two dimensions. Students solve mathematical and real world problems using coordinates.

<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>• Write and interpret numerical expressions</li> <li>• Analyze patterns and relationships</li> </ul>	<b>Measurement and Data (MD)</b> <ul style="list-style-type: none"> <li>• Convert like measurement units within a given measurement system</li> <li>• Represent and interpret data</li> <li>• Geometric measurement: Understand concepts of volume and relate volume to multiplication and to addition</li> </ul>
<b>Number and Operations in Base Ten (NBT)</b> <ul style="list-style-type: none"> <li>• Understand the place value system</li> <li>• Perform operations with multi-digit whole numbers and with decimals to hundredths</li> </ul>	<b>Geometry (G)</b> <ul style="list-style-type: none"> <li>• Graph points on the coordinate plane to solve real-world and mathematical problems</li> <li>• Classify two-dimensional figures into categories based on their properties</li> </ul>
<b>Number and Operations—Fractions (NF)</b> <ul style="list-style-type: none"> <li>• Use equivalent fractions as a strategy to add and subtract fractions</li> <li>• Apply and extend previous understandings of multip. &amp; division to multiply and divide fractions</li> </ul>	

# Pentucket Regional School District

## Mathematics Curriculum Guide

## Grade 5



### PRSD Curriculum Tools and Resources - Grade 5

Eureka Module	Concept	Focus Standard	Focus Standard for Mathematical Practice
1	<b>Place Value and Decimal Fractions</b>	Number and Operations in Base Ten 5.NBT.1, 5.NBT.2 5.NBT.3, 5.NBT.4 5.NBT.7, 5.MD.1	MP.6 MP.7 MP.8
2	<b>Multi-Digit Whole Number and Decimal Fraction Operations</b>	Operations and Algebraic Thinking Number and Operations in Base Ten 5.OA.1, 5.OA.2, 5.NBT.1, 5.NBT.2, 5.NBT.5, 5.NBT.6 5.NBT.7, 5.MD.1	MP.1 MP.2 MP.7 MP.8
3	<b>Addition and Subtraction of Fractions</b>	Number and Operations—Fractions 5.NF.1, 5.NF.2	MP.1 MP.3 MP.5 MP.7 MP.8
4	<b>Multiplication and Division of Fractions and Decimal Fractions</b>	Operations and Algebraic Thinking Number and Operations—Fractions 5.OA.1, 5.OA.2 5.NBT.7, 5.NF.3, 5.NF.4, 5.NF.5, 5.NF.6 5.NF.7, 5.MD.1, 5.MD.2	MP.2 MP.4 MP.5
5	<b>Addition and Multiplication with Volume and Area</b>	Number and Operations—Fractions Measurement and Data 5.NF.4, 5.NF.6, 5.MD.3 5.MD.4, 5.MD.5, 5.G.3 5.G.4	MP.1 MP.2 MP.3 MP.4 MP.6 MP.7
6	<b>Problem Solving with the Coordinate Plane</b>	Operations and Algebraic Thinking Geometry 5.OA.2, 5.OA.3, 5.G.1 5.G.2	MP.1 MP.2 MP.3 MP.6 MP.7



### 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 Fifth Grade occurs in a 60 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 60 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 and 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.