



Third Grade Priority Areas

<p>Developing understanding of multiplication and division and strategies for multiplication and division within 100 (OA, NBT)</p>	<p>Students develop an understanding of the meanings of multiplication and division of whole numbers through activities and problems involving equal-sized groups, arrays, and area models; multiplication is finding an unknown product, and division is finding an unknown factor in these situations. For equal-sized group situations, division can require finding the unknown number of groups or the unknown group size. Students use properties of operations to calculate products of whole numbers, using increasingly sophisticated strategies based on these properties to solve multiplication and division problems involving single-digit factors. By comparing a variety of solution strategies, students learn the relationship between multiplication and division.</p>
<p>Developing understanding of fractions, especially unit fractions (fractions with numerator 1) (NF)</p>	<p>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.</p>
<p>Developing understanding of the structure of rectangular arrays and of area (G)</p>	<p>Students recognize area as an attribute of two-dimensional regions. They measure the area of a shape by finding the total number of same-size units of area required to cover the shape without gaps or overlaps, a square with sides of unit length being the standard unit for measuring area. Students understand that rectangular arrays can be decomposed into identical rows or into identical columns, build a connection to multiplication, and justify using multiplication to determine the area of a rectangle.</p>
<p>Describing and analyzing two-dimensional shapes(G)</p>	<p>Students describe, analyze, and compare properties of two-dimensional shapes. They compare and classify shapes by their sides and angles, and connect these with definitions of shapes. Students also relate their fraction work to geometry by expressing the area of part of a shape as a unit fraction of the whole.</p>

Mathematical Practice Standards

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

<p>Operations and Algebraic Thinking (OA)</p> <ul style="list-style-type: none"> • Represent and solve problems involving multiplication and division • Understand properties of multiplication and the relationship between multiplication and division • Multiply and divide within 100 • Solve problems involving the four operations; identify/ explain patterns in arithmetic 	<p>Measurement and Data (MD)</p> <ul style="list-style-type: none"> • Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects • Represent and interpret data • Geometric measurement: understand concepts of area and relate area to multiplication and to addition. • Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures
<p>Number and Operations in Base Ten (NBT)</p> <ul style="list-style-type: none"> • Use place value understanding and properties of operations to perform multi-digit arithmetic 	<p>Geometry (G)</p> <ul style="list-style-type: none"> • Reason with shapes and their attributes
<p>Number and Operations - Fractions (NF)</p> <ul style="list-style-type: none"> • Develop understanding of fractions as numbers 	

Pentucket Regional School District

Mathematics Curriculum Guide

Grade 3



PRSD Curriculum Tools and Resources - Grade 3

Eureka Module	Concept	Focus Standard	Focus Standard for Mathematical Practice
1	Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10	Operations and Algebraic Thinking 3.OA.1, 3.OA.2, 3.OA.3 3.OA.4, 3.OA.5, 3.OA.6 3.OA.7, 3.OA.8	MP.1 MP.2 MP.3 MP.4 MP.7
2	Place Value and Problem Solving with Units of Measure	Number and Operations in Base Ten Measurement and Data 3.NBT.1, 3.NBT.2 3.MD.1, 3.MD.2	MP.2 MP.4 MP.6 MP.7
3	Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10	Operations and Algebraic Thinking 3.OA.3, 3.OA.4, 3.OA.5 3.OA.7, 3.OA.8, 3.OA.9 3.NBT.3	MP.1 MP.3 MP.4 MP.5 MP.7
4	Multiplication and Area	Measurement and Data 3.MD.5, 3.MD.6, 3.MD.7	MP.2 MP.3 MP.6 MP.7 MP.8
5	Fractions as Numbers on the Number Line	Number and Operations - Fractions 3.NF.1, 3.NF.2, 3.NF.3 3.G.2	MP.2 MP.3 MP.6 MP.7
6	Collecting and Displaying Data	Measurement and Data 3.MD.3, 3.MD.4	MP.2 MP.5 MP.6 MP.7
7	Geometry and Measurement Word Problems	Measurement and Data Geometry 3.OA.8, 3.MD.4, 3.MD.8, 3.G.1	MP.1 MP.3 MP.5 MP.6



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 Third 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 70 minutes in small group pull-out sessions or in 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.