Pentucket Regional School District

Mathematics Curriculum Guide

Grade 2



Second Grade Priority Areas			
Extending understanding of base-ten notation (NBT)	Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens, and multiples of hundreds, tens, and ones, as well as number relationships involving these units, including comparing. Students understand multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds + 5 tens + 3 ones).		
Building fluency with addition and subtraction (OA, NBT)	Students use their understanding of addition to develop fluency with addition and subtraction. They solve problems by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context to mentally calculate sums and differences.		
Using standard units of measure (MD)	Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length.		
Describing and analyzing shapes (G)	Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.		

Mathematical Practice Standards

- 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.
- **5.** Use appropriate tools strategically.
- **6.** Attend to precision.
- 7. Look for and make use of structure.
- 8. Model with mathematics.

Content Standards				
 Operations and Algebraic Thinking (OA) Represent and solve problems involving addition and subtraction Add and subtract within 20 Work with equal groups of objects to gain foundations for multiplication 	 Measurement and Data (MD) Measure lengths indirectly and by iterating length units Relate addition and subtraction to length Work with time and money Represent and interpret data 			
Number and Operations in Base Ten (NBT) Understand place value Use place value understanding and properties of operations to add and subtract 	Geometry (G) Reason with shapes and their attributes			

Pentucket Regional School District

Mathematics Curriculum Guide

Grade 2



PRSD Curriculum Tools and Resources - Grade 2

Eureka Module	Concept	Focus Standard	Focus Standard for Mathematical Practice
1	Sums and Differences to 100	Operations and Algebraic Thinking 2.OA.1 , 2.OA.2, 2.NBT.5	MP.2 MP.5 MP.7 MP.8
2	Addition and Subtraction of Length Units	Measurement and Data 2.MD.1, 2.MD.2, 2.MD.3 2.MD.4, 2.MD.5, 2.MD.6	MP.2 MP.3 MP.5 MP.6
3	Place Value, Counting, and Comparison of Numbers to 1,000	Number and Operations in Base Ten 2.NBT.1, 2.NBT.2, 2.NBT.3, 2.NBT.4	MP.2 MP.3 MP.6 MP.7 MP.8
4	Addition and Subtraction Within 200 with Word Problems to 100	Number and Operations in Base Ten 2.OA.1, 2.NBT.5, 2.NBT.6, 2.NBT.7, 2.NBT.8, 2.NBT.9	MP.1 MP.2 MP.3 MP.4 MP.6
5	Addition and Subtraction Within 1,000 with Word Problems to 100	Number and Operations in Base Ten 2.NBT.7, 2.NBT.8, 2.NBT.9	MP.3 MP.6 MP.7 MP.8
6	Foundations of Multiplication and Division	Operations and Algebraic Thinking 2.OA.3, 2.OA.4, 2.G.2	MP.3 MP.4 MP.7 MP.8
7	Problem Solving with Length, Money, and Data	Measurement and Data 2.NBT.5 , 2.MD.1, 2.MD.2, 2.MD.3 2.MD.4, 2.MD.5, 2.MD.6, 2.MD.8, 2.MD.9 2.MD.10	MP.1 MP.2 MP.4 MP.5 MP.6
8	Time, Shapes, and Fractions as Equal Parts of Shapes	Geometry & Measurement and Data 2.MD.7, 2.G.1, 2.G.3	MP.1 MP.3 MP.6 MP.7

Pentucket Regional School District

Mathematics Curriculum Guide

Grade 2



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 Second 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 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.