

Berlin Brothersvalley School District

Berlin Brothersvalley Elementary School

Year at a Glance Curriculum

Math Department 2nd Grade Math 2nd Grade

Course Description: In this class, students will master addition and subtraction strategies, exploring both traditional methods and innovative techniques to strengthen their number sense. Through interactive activities and games, children will develop a deep understanding of mathematical operations, paving the way for numerical fluency. Mental math takes center stage as students sharpen their computational skills through exercises designed to build rapid and accurate calculations. Through daily practice and engaging challenges, students will develop the ability to solve problems mentally, promoting mathematical agility and confidence. The curriculum also introduces students to the fascinating world of geometry as they learn to identify, classify, and manipulate various shapes. Additionally, they will explore the concepts of measurement, discovering the importance of units, tools, and precision in quantifying length, weight, and capacity. As the curriculum progresses, students will master the fundamentals of telling time and develop a foundational understanding of fractions. With a focus on fostering a love for learning, our second-grade math curriculum aims to make mathematics enjoyable and accessible, setting the stage for continued success in future academic pursuits. Please see below for a concise outline of the course.

Units of Study	Competencies	Approximate Timeframe	Standards
Money: Coins and Making Change	Students will be able to recognize and count coins.	13 days	CC.2.4.2.A.3
Number Patterns: Lines, Puzzles, and Comparing	Students will be able to explore number lines, create class number scrolls, solve number grid puzzles, analyze equivalent names for numbers, identify ways to make ten, evaluate even and odd numbers, demonstrate skip counting patterns, compare numbers, distinguish groups by tens, solve addition number stories, apply doubles and combinations of ten, and apply the making ten strategy and the near double strategy.	26 days	CC.2.1.2.B.1
Addition Strategies	Students will be able to distinguish groups by tens, solve addition number stories, apply doubles and combinations of ten, apply the making ten strategy and the near double strategy, apply the turn around rule for addition, understand subtraction and that the turn around rule does not apply, explore addition tools, even and odd patterns and shapes, analyze even numbers and equal addends, create name-collection boxes, play "Name That Number", solve frame and arrow problems, and	35 days	CC.2.1.2.B.2

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	remember addition strategies.		
Subtraction Strategies	Students will be able to understand subtraction from think addition, build fact families, play salute, remember subtraction strategies, recall -0 and -1 fact strategies, play subtraction top-it, and solve frame and arrow problems.	33 days	CC.2.2.2.A.1
More Fact Strategies for Addition and Subtraction	Students will be able to determine “What’s my rule?”, explain the going-back and up-through-ten strategy, and explore rectangles, fact wheels, and coins.	30 days	CC.2.2.2.A.2
Place Value and Measurement	Students will be able to state the time to the hour, half-hour, and nearest five minutes, assemble base-ten blocks to create 3-digit numbers and formulate numbers in expanded form, interpret an object’s measurement in centimeters, inches, or feet, recognize and count coins to make different coin combinations, show addition and subtraction by adding or subtracting 10 or 100, formulate answers using open number lines, recognize specific strategies for solving number stories, and solve addition problems using two different strategies.	20 days	CC.2.1.2.B.3 CC.2.4.2.A.1 CC.2.4.2.A.6
Data, Graphs, and Shapes	Students will be able to solve comparison and two-step number stories, construct ballpark estimates to solve problems, apply strategies to solve open response problems, build shapes on geoboards, use addition properties to solve open response problems, explore U.S. customary length units and make measurements, and draw picture graphs and bar graphs to represent a data set.	13 days	CC.2.4.2.A.4 CC.2.3.2.A.1
Fractions	Students will be able to create concrete models and visual representations to demonstrate fractions.	10 days	CC.2.3.2.A.2

*Please visit pdesas.org for a complete list of standards taught in this course and for more information regarding PA State Standards for this course.

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