

**Berlin Brothersvalley School District
Berlin Brothersvalley Elementary School
Year at a Glance Curriculum**

**Math Department
Math
3rd Grade**

Course Description:

In this class, students will represent and solve problems involving multiplication and division and understand properties of multiplication and the relationship between multiplication and division. They will use strategies to multiply and divide within 100, solve problems involving the four operations and identify and explain patterns in arithmetic. Students will use properties of operations and place-value understanding and strategies to add and subtract within 1,000 and multiply using multiples of 10. They will develop an understanding of fractions as numbers and reason about their size based on their relationship to whole numbers and other fractions. Students will solve problems involving measurement and estimation of length, time, liquid volumes and masses of objects. They will represent and interpret data. Students will understand concepts of area and relate it to multiplication and addition. They will recognize perimeter as an attribute of plane figures and distinguish between linear and area measures. They will reason with shapes and their attributes and decompose shapes into fractional parts. Please see below for a concise outline of the course.

Units of Study	Competencies	Approximate Timeframe	Standards
Multi-Digit Addition and Subtraction	Students will be able to round and estimate 2 and 3 digit numbers to the nearest 10 and 100, use a variety of strategies to solve extended and multi digit addition and subtraction facts, and solve 1 and 2 step addition and subtraction number stories.	5 weeks	CC.2.1.3.B.1
Measurement	Students will be able to tell time to the nearest minute and calculate elapsed time, compare liquid volumes, measure to the nearest whole, half and quarter inch and centimeter using a ruler, and solve number stories with measurements.	5 weeks	CC.2.4.3.A.2 CC.2.4.3.A.3
Foundations of Multiplication and Division	Students will be able to model the concept of multiplication and division, solve number stories with multiplication and division, use various multiplication strategies, multiply with larger factors and extended multiplication and division facts, identify factor pairs of	7 weeks	CC.2.2.3.A.3 CC.2.2.3.A.1

**Berlin Brothersvalley School District
Berlin Brothersvalley Elementary School
Year at a Glance Curriculum**

**Math Department
Math
3rd Grade**

	products, and multiply facts with multiples of 10.		
Graphing	Students will be able to represent and interpret data using a scaled bar graph, picture graph and line plot.	1 week	CC.2.4.3.A.4
Patterns	Students will be able to solve number patterns using frames and arrows and in and out tables, find equivalent names for numbers, and solve equations using the order of operations.	3 weeks	CC.2.2.3.A.4
Fractions	Students will be able to identify fractions as part of a whole, represent fractions and identify equivalent fractions using a model, compare fractions using models and number lines, and solve number stories involving fractions.	4 weeks	CC.2.1.3.C.1 CC.2.3.3.A.2
Polygon Attributes	Students will be able to identify the attributes of a polygon and the attributes of specific quadrilaterals.	1.5 weeks	CC.2.3.3.A.1
Area and Perimeter	Students will be able to calculate the area and perimeter of rectangles.	1.5 weeks	CC.2.4.3.A.5 CC.2.4.3.A.6
Application and Review of Math Skills	Students will be able to apply the foundations of 3rd grade math to a variety of math problems.	8 weeks	CC.2.23.A.2 CC.2.4.3.A.1

*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.

Revised 2/21/24