Northern Cambria School District

A Teacher/Parent/Student Friendly Curriculum Map

Course Name: 3rd Grade Math LS

Course Description:

In this 3rd Grade Learning Support Math class, students learn and master procedures, concepts, and applications in all of these five Common Core State Standards content domains: Numbers and Operations, Algebraic Concepts, Geometry, and Measurements, Data, and Probability.

- During the course of the school year, this class will cover 15 chapters.

Chapter 1: Addition and Subtraction Concepts
Chapter 2: Place Value and Number Sense
Chapter 3: Compare, Order, and Round Numbers
Chapter 4: Addition
Chapter 5: Subtraction
Chapter 6: Use Money
Chapter 7: Understand Time
Chapter 8: Understand Multiplication
Chapter 9: Multiplication Facts and Patterns
Chapter 10: Understand Division
Chapter 11: Data and Graphs
Chapter 12: Geometric Shapes
Chapter 13: Solid and Plane Figures
Chapter 14: Perimeter and Area
Chapter 15: Understand Fractions

- Students will complete Spring Math daily. This is a paper/pencil invention process that enables students to achieve math fact and process mastery.

- Students will complete XtraMath daily. This is an online math fact fluency program that helps students develop quick recall and automaticity of basic math facts.

Course Resources:

Maletsky, E. & McLeod, J. (2009). *Pennsylvania HSP Math 3rd Grade* Book and Workbook. Harcourt School Publisher.

Bell, M., & Bernstein, L. J. (2015). *Everyday Mathematics 3, Grade 3, Student Journal*. McGraw-Hill Education**.**

Sourcewell. (2023), *Spring Math* - a paper/pencil Math program that provides classwide and individual intervention of math skills items built from aligned standards with flexible modes to improve proficiency.

Renaissance Learning Inc. (2023), *Star Math*- a student-based, computer-adaptive assessment for measuring student achievement in math.

XtraMath - an online math fact fluency program that helps students develop quick recall and automaticity of basic math facts.

Prodigy - adaptive online math curriculum that offers interactive lessons and activities that measure student progress.

Supplemental Worksheets
Manipulative Kits
Learning Games

End of Course Outcomes:

Students will be able to:

Numbers and Operations

- **Place Value Properties of Operations**: Use place value to round whole numbers to the nearest thousand. Use place value to compare and order whole numbers. Multiply one-digit whole numbers by multiples of 10 using strategies based on place value and properties of operations.
- **Fractions:** Understand fractions as a quantity formed when a whole is partitioned into equal parts. Compare fractions and identify equivalent fractions.

Algebraic Concepts

- **Addition, Subtraction, Multiplication, Patterns:** Fluently add or subtract multi-digit numbers. Solve word problems using addition and subtraction. Multiply one-digit whole numbers.

Geometry

- **Two- and Three-dimensional Figures:** Identify shapes based on their characteristics. Compare and sort shapes. Identify three-dimensional figures.

<u>Measurement, Data and Probability</u>

- **Measurement, Data Displays, Time, Money:** Tell and write time to nearest minute. Count money. Draw a scaled picture graph and scaled bar graph to represent data in a set with several categories. Measure lengths using a ruler to the nearest inch and half inch. Find the perimeter of shapes.

Major Subject Area Academic Standards Addressed:

The following PA Standards in mathematics will be covered in this course:

CC.2.1.3.B.1 Apply place value understanding and properties of operations to perform multi-digit arithmetic.

CC.2.2.3.A.4 Solve problems involving the four operations, and identify and explain patterns in arithmetic.

CC.2.1.3.C.1 Explore and develop an understanding of fractions as numbers.

CC.2.3.3.A.2 Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

CC.2.4.3.A.2 Tell and write time to the nearest minute.

CC.2.4.3.A.3 Solve problems and make change involving money using a combination of coins and bills.

CC.2.4.3.A.1 Solve problems involving measurement and estimation of temperature, liquid volume, mass or length.

CC.2.4.3.A.6 Solve problems involving perimeters of polygons.

CC.2.4.3.A.4 Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

CC.2.3.3.A.1 Identify, compare, and classify shapes and their attributes.

CC.2.2.3.A.3   Demonstrate multiplication and division fluency.

Course Concepts by Sequence with Short Description:

August/September	**Chapter 1: Addition and Subtraction Concepts** *Fact Families, Missing Addends, 2-Digit Addition and Subtraction	**CC.2.1.3.B.1** **CC.2.2.3.A.4**
	Chapter 2: Place Value and Number Sense *Even and Odd, Place Value up to 6 Digits, Number Patterns	**CC.2.1.3.B.1** **CC.2.2.3.A.4**
October	**Chapter 3: Compare, Order, and Round Numbers** *Compare, Numbers, Order Numbers, Round to the Nearest 10, 100, and 1,000.	**CC.2.1.3.B.1**
	Chapter 4: Addition *Estimate Sums, Addition with Regrouping, Adding 3 and 4 Digit Numbers	**CC.2.1.3.B.1** **CC.2.2.3.A.4**
November	**Chapters 5: Subtraction** *Estimate Differences, Subtraction with Regrouping, Subtract Across Zeros, Subtract 3 and 4 Digit Numbers	**CC.2.1.3.B.1** **CC.2.2.3.A.4**
	Chapter 6: Use Money *Count Bills and Coins, Making Change, Compare Money Amounts, Add and Subtract Money	**CC.2.4.3.A.3**
December	**Chapters 7: Understand Time** *Tell Time to the Minute, A.M. and P.M., Elapsed	**CC.2.2.3.A.2**

	Time, Use a Schedule, Use a Calendar	
January	**Chapter 8: Understand Multiplication** *Connect Addition and Multiplication Arrays, Multiplication Facts through 11 **Chapter 9: Multiplication Facts and Patterns** *Find a Rule, Multiplication Properties, Multiply with 3 Factors, Multiplication Number Stories	**CC.2.2.3.A.4** **CC.2.2.3.A.3** **CC.2.4.3.A.3** **CC.2.2.3.A.4**
February	**Chapter 10: Understand Division** *Connect Subtraction and Division, Fact Families with Multiplication and Division, Division Number Stories **Chapter 11: Data and Graphs** *Bar Graphs, Line Graphs, Ordered Pairs, Line Plots, Make a Bar Graphs	**CC.2.4.3.A.3** **CC.2.2.3.A.4** **CC.2.4.3.A.4** **CC.2.4.3.A.1**
March	**Chapter 12: Geometric Shapes** *Identifying Plane Figures, Triangles, Quadrilaterals, Congruent Figures, Lines of Symmetry **Chapter 13: Solid and Plane Figures** *Identify Solid Figures, Attributes of Solid Figures	**CC.2.3.3.A.1** **CC.2.3.3.A.1**
April	**Chapter 14: Perimeter and Area** *Measure to the Nearest Inch and Centimeter, Perimeter and Area of Shapes **Chapter 15: Fractions** *Parts of a Whole, Writing	**CC.2.4.3.A.1** **CC.2.4.3.A.6** **CC.2.1.3.C.1**

	Fractions, Equivalent Fractions, Compare Fractions, Fractions Equal to One, Add and Subtract Fractions	**CC.2.3.3.A.2**
May	**Spiral Review - Everyday Math** *This will be a review of all concepts learned throughout the school year and listed above.	

Student Assessments:

Lesson Quizzes (40% weighted)
Chapter Tests (50% weighted)
Class Work/Participation (10% weighted)
Spring Math Assessment (This is not graded)
XtraMath (This is not graded)
STAR Math Assessment (This is not graded)

Grading:

    A - 100% to 92%
    B - 91% to 83%
    C - 82% to 74%
    D - 73% to 65%
    F - 64% to 0