

# Comprehensive Math Curriculum

## Course Contents (2<sup>nd</sup> Grade Math)

### COURSE NAME: 2ND GRADE MATH

#### 1. Counting and Identifying Numbers

- 1.1 Identifying and Counting Numbers to 100
- 1.2 Identifying and Counting Numbers past 100
- 1.3 Skip Counting by Two (up to 100)
- 1.4 Skip Counting by Five (up to 100)
- 1.5 Skip Counting by Ten (up to 100)
- 1.6 Skip Counting by Twenty-five (up to 1000)
- 1.7 Reverse Counting (starting at 100)
- 1.8 Reverse Skip Counting by Two (starting 100)
- 1.9 Reverse Skip Counting by Five (starting 100)
- 1.10 Reverse Skip Counting by Ten (starting 100)

#### 2. Place Value, Writing Numbers and Number Combinations

- 2.1 Introduction to Place Values
- 2.2 Place Values for 3-digit Numbers
- 2.3 Writing Numbers Using Words (up to 100)
- 2.4 Write Numbers that are Given in Words (up to 100)
- 2.5 Number Combinations (up to 3 digits)

#### 3. Naming, Comparing and Arranging Numbers

- 3.1 Name the Number
- 3.2 Comparing 2-Digit Numbers
- 3.3 Comparing 3-Digit Numbers
- 3.4 Arranging Numbers in Ascending Order
- 3.5 Arranging Numbers in Descending Order
- 3.6 Number Types
- 3.7 Even and Odd Numbers

#### 4. Addition

- 4.1 Introduction to Addition
- 4.2 Addition Using Objects
- 4.3 Addition Using an Addition Table
- 4.4 Addition Using Regrouping
- 4.5 Addition without Carrying Numbers (Optional)
- 4.6 Addition with Carrying Numbers
- 4.7 Adding a 2-digit Number and a 1-digit Number
- 4.8 Adding a 2-digit Number and a 2-digit Number
- 4.9 Adding a 3-digit Number and a 2-digit Number
- 4.10 Adding a 3-digit Number and a 3-digit Number
- 4.11 Adding 3 Number Sets

#### 5. Subtraction

- 5.1 Introduction to Subtraction
- 5.2 Subtraction in Relation to Addition
- 5.3 Subtraction Using Objects
- 5.4 Subtraction Using a Subtraction Table
- 5.5 Subtraction Using Regrouping
- 5.6 Subtraction without Borrowing Numbers (Optional)
- 5.7 Subtraction with Borrowing Numbers
- 5.8 Subtracting a 1-digit Number from a 2-digit Number
- 5.9 Subtracting a 1-digit Number from a 3-digit Number
- 5.10 Subtracting a 2-digit Number from a 2-digit Number
- 5.11 Subtracting a 2-digit Number from a 3-digit Number
- 5.12 Subtracting a 3-digit Number from a 3-digit Number

#### 6. Multiplication

- 6.1 Introduction to Multiplication
- 6.2 Multiplication in Relation to Addition
- 6.3 Multiplication Using Objects
- 6.4 Multiplication Using a Multiplication Table
- 6.5 Multiplication Tricks
- 6.6 Multiplying a 2-digit Number by a 1-digit Number

#### 7. Division

- 7.1 Introduction to Division
- 7.2 Division in Relation to Subtraction

#### 8. Rounding and Estimating

- 8.1 Rounding to the Nearest 10 using a Number Line
- 8.2 Rounding to the Nearest 100 using a Number Line
- 8.3 Rounding without using a Number Line
- 8.4 Estimating with Addition
- 8.5 Estimating with Subtraction

#### 9. Fractions

- 9.1 Introduction to Fractions
- 9.2 Identifying Fractions
- 9.3 Writing Fractions
- 9.4 Equivalent Fractions
- 9.5 Writing Equivalent Fractions
- 9.6 Comparing Fractions
- 9.7 Adding Fractions
- 9.8 Subtracting Fractions

#### 10. Tables, Charts and Graphs

- 10.1 Introduction to Tables, Charts and Graphs
- 10.2 Creating Tally Charts
- 10.3 Interpreting Tally Charts
- 10.4 Creating Picture Graphs
- 10.5 Interpreting Picture Graphs
- 10.6 Creating Bar Graphs
- 10.7 Interpreting Bar Graphs

#### 11. Algebra

- 11.1 Patterns
- 11.2 Arithmetic Number Patterns
- 11.3 Geometric Number Patterns
- 11.4 Find the Missing Number
- 11.5 Properties of Addition and Multiplication
- 11.6 Expressions and Equations
- 11.7 Writing Expressions and Equations
- 11.8 Completing Equations

#### 12. Geometry

- 12.1 Basic 2-dimensional Geometric Shapes
- 12.2 Identifying 2-dimensional Shapes
- 12.3 Polygons
- 12.4 Basic 3-dimensional Geometric Shapes
- 12.5 Identifying 3-dimensional Shapes
- 12.6 Working with Shapes
- 12.7 Identifying Congruent 2-dimensional Shapes
- 12.8 Lines of Symmetry
- 12.9 Completing the Shape

#### 13. Time

- 13.1 Days, Weeks, Months and Years
- 13.2 Days
- 13.3 Weeks
- 13.4 Months
- 13.5 Years
- 13.6 Converting Time: Days, Weeks, Months and Years
- 13.7 The Four Seasons
- 13.8 Seconds, Minutes and Hours
- 13.9 Digital and Analog Clocks
- 13.10 Telling Time to the Hour
- 13.11 Telling Time to the Half-hour
- 13.12 Telling Time to the Quarter-hour
- 13.13 Telling Time to 5 Minute Intervals
- 13.14 Converting Time: Seconds, Minutes and Hours
- 13.15 Duration of Time

#### 14. Money

- 14.1 Pennies, Nickels, Dimes, Quarters

# Comprehensive Math Curriculum

## Course Contents (2<sup>nd</sup> Grade Conti...)

7.3 Division in Relation to Multiplication  
7.4 Division Using Objects  
7.5 Division with a Remainder  
7.6 Division with 0 and 1

14.2 Converting Nickels, Dimes and Quarters to Pennies  
14.3 Converting Pennies to Nickels, Dimes and Quarters  
14.4 Counting Coins up to One Dollar  
14.5 Counting Coins Past One Dollar  
14.6 Dollars  
14.7 Counting Dollars and Coins  
14.8 Comparing Money

### 15. Measurements

15.1 Systems of Measurement  
15.2 The U.S. System of Measurement  
15.3 The Metric System of Measurement  
15.4 Length  
15.5 Perimeter and Area  
15.6 Volume  
15.7 Weight  
15.8 Temperature