## Summit of Math: Grade 4 Curriculum

Chapter 1 Whole Numbers

| Lesson |  | Topic | NJSLS |
| :--- | :--- | :--- | :--- |
| 1-1 Place Value | A) Place Values to Millions | 4.NBT.A.1 |  |
|  | B) Expanded and Standard Form of Numbers | 4.NBT.A.2 |  |
| 1-2 Reading Numbers | A) Reading Numbers to Millions | 4.NBT.A.2 |  |
| 1-3 Writing Numbers | A) Writing Numbers to Millions | 4.NBT.A.2 |  |
| 1-4 Comparing Numbers | A) Comparing Numbers with Six or Fewer Digits | 4.NBT.A.2 |  |
| 1-5 Ordering Numbers | A) Ordering Whole Numbers |  |  |
| 1-6 Rounding | A) Rounding to a Given Place Value | 4.NBT.A.3 |  |
|  | B) Rounding to a Lead Digit |  |  |

Chapter 2 Adding and Subtracting Whole Numbers

| Lesson | Topic | NJSLS |
| :---: | :---: | :---: |
| 2-1 Vertical Addition | A) Vertical Addition of Two Numbers with Six or Fewer Digits | 4.OA.A. 3 <br> 4.NBT.B. 4 |
|  | B) Vertical Addition of Three or More Numbers |  |
| 2-2 Horizontal Addition | A) Horizontal Addition of Two Numbers | 4.OA.A. 3 <br> 4.NBT.B. 4 |
|  | B) Horizontal Addition of Three or More Numbers |  |
| 2-3 Vertical Subtraction | A) Vertical Subtraction of Numbers with Six or Fewer Digits | $\begin{aligned} & \text { 4.OA.A. } 3 \\ & \text { 4.NBT.B. } 4 \end{aligned}$ |
| 2-4 Horizontal Subtraction | A) Horizontal Subtraction of Two Numbers | 4.OA.A. 3 <br> 4.NBT.B. 4 |
|  | B) Horizontal Addition or Subtraction of Three or More Numbers |  |
| 2-5 Addition and Subtraction Relations | A) Relationships Between Addition and Subtraction Sentences | 4.NBT.B. 4 |
|  | B) Missing Numbers in Addition and Subtraction Sentences |  |
| 2-6 Estimating Sums and Differences | A) Estimating Sums and Differences | $\begin{aligned} & \text { 4.OA.A. } 3 \\ & \text { 4.NBT.A. } 3 \end{aligned}$ |

## Summit of Math: Grade 4 Curriculum

Chapter 3 Multiplying Whole Numbers

| Lesson | Topic | NJSLS |
| :--- | :--- | :--- |
| 3-1 Basic Multiplication | A) Single Digit Multiplication | 4.OA.A.1 |
| Facts |  | 4.OA.A.2 |
|  | A) Multiplying a One-Digit Number and Ten | 4.OA.A.3 |
| 3-2 Products with <br> Multiples of 10 | B) Pattern of Zeros - Multiplication | 4.OA.A.2 |
|  |  | 4.OA.A.3 |
|  |  |  |
| 4.NBT.B.5 |  |  |

## Summit of Math: Grade 4 Curriculum

## Chapter 4 Dividing Whole Numbers

| Lesson | Topic | NJSLS |  |
| :--- | :--- | :--- | :--- |
| 4-1 Basic Division Facts | A) One-Digit Quotients When Dividing by One-Digit <br> Numbers | 4.OA.A.3 |  |
| 4-2 Quotients with <br> Multiples of Ten | A) One Digit Quotients When Dividing by Ten | 4.OA.A.3 |  |
|  | B) Pattern of Zeros - Division | 4.NBT.A.1 |  |
| 4-3 Dividing by One-Digit <br> Numbers with No <br> Remainders - Models | A) Base Ten Blocks to Divide Two-Digit by One-Digit <br> Numbers | B) Base Ten Blocks to Divide by Three-Digit by One- <br> Digit Numbers | 4.OA.A.3 |

## Summit of Math: Grade 4 Curriculum

Chapter 5 Operations and Patterns

| Lesson | Topic | NJSLS |
| :---: | :---: | :---: |
| 5-1 Multiplication and Division Relations | A) Relationships Between Multiplication and Division Sentences | 4.NBT.B. 6 |
|  | B) Missing Numbers in Multiplication and Division Sentences |  |
| 5-2 Mixed Operations | A) Horizontal Multiplication and Division of Three or More Numbers | 4.OA.A. 3 |
|  | B) Order of Operations to Evaluate Expressions without Grouping Symbols |  |
| 5-3 Expressions and Equations | A) Addition and Subtraction Expressions | $\begin{aligned} & \text { 4.OA.A. } 1 \\ & \text { 4.OA.A. } 3 \end{aligned}$ |
|  | B) Multiplication and Division Expressions |  |
|  | C) Expressions with More Than One Operation |  |
|  | D) Number Sentences |  |
| 5-4 Introduction to Patterns | A) Repeating Patterns | 4.OA.C. 5 |
| 5-5 Rules and Patterns | A) Patterns and Rules | 4.OA.C. 5 |
|  | B) Continuing and Completing Patterns |  |

## Summit of Math: Grade 4 Curriculum

Chapter 6 Fraction Concepts

| Lesson | Topic | NJSLS |
| :---: | :---: | :---: |
| 6-1 Divisibility and Multiples | A) Divisibility by $2,3,5$, and 10 | 4.OA.B. 4 |
|  | B) Multiples |  |
| 6-2 Factors | A) Factors | 4.OA.B. 4 |
|  | B) Prime and Composite Numbers |  |
| 6-3 Introduction to Fractions | A) Word Form of Fractions | 3.NF.A. 1 |
|  | B) Writing Fractions from Models |  |
|  | C) Modeling Fractions with Fraction Bars |  |
| 6-4 Fractions on Number Lines | A) Writing Fractions from Number Lines | $\begin{aligned} & \text { 3.NF.A.2.a } \\ & \text { 3.NF.A.2.b } \end{aligned}$ |
|  | B) Modeling Fractions on Number Lines |  |
| 6-5 Equivalent Fraction Models | A) Models to Write Equivalent Fractions | 4.NF.A. 1 |
|  | B) Models to Simplify Fractions |  |
|  | C) Models to Identify Equivalent Fractions |  |
| 6-6 Equivalent Fractions | A) Writing Equivalent Fractions | 4.NF.A. 1 |
|  | B) Simplifying Fractions |  |
| 6-7 Comparing Fractions | A) Comparing Fractions with the Same Denominator | 4.NF.A. 2 |
|  | B) Comparing Fractions with the Same Numerator |  |
|  | C) Comparing Fractions with Different Numerators and Denominators |  |
| 6-8 Ordering Fractions | A) Ordering Fractions with the Same Denominator or Numerator | 4.NF.A. 2 |
|  | B) Ordering Fractions with Different Numerators or Denominators |  |

## Summit of Math: Grade 4 Curriculum

Chapter 7 Fraction Addition, Subtraction, and Multiplication

| Lesson | Topic | NJSLS |
| :---: | :---: | :---: |
| 7-1 Fraction <br> Decomposition with Models | A) Fractions Bars to Decompose Fractions | 4.NF.B.3.a <br> 4.NF.B.3.b <br> 4.NF.B.4.a |
|  | B) Number Lines to Decompose Fractions |  |
| 7-2 Fraction <br> Decomposition with Same Denominators | A) Decomposition of Fractions | $\begin{aligned} & \text { 4.NF.B.3.a } \\ & \text { 4.NF.B.3.b } \end{aligned}$ |
| 7-3 Add Fractions - No Regrouping | A) Models to Add Fractions with Like Denominators No Regrouping | 4.NF.B.3.a <br> 4.NF.B.3.c <br> 4.NF.B.3.d |
|  | B) Adding Fractions with Like Denominators - No Regrouping |  |
|  | C) Vertical Addition with Mixed Numbers - No Regrouping |  |
| 7-4 Using Models to Add Fractions - Regrouping | A) Models to Write Improper Fractions as Mixed Numbers | 4.NF.B.3.a <br> 4.NF.B.3.c <br> 4.NF.B.3.d |
|  | B) Models to Add Fractions with Like Denominators Regrouping |  |
| 7-5 Adding Fractions Regrouping | A) Decomposition to Write Improper Fractions as Mixed Numbers | 4.NF.B.3.a <br> 4.NF.B.3.C <br> 4.NF.B.3.d |
|  | B) Adding Fractions with Like Denominators Regrouping |  |
|  | C) Vertical Addition with Mixed Numbers Regrouping |  |
| 7-6 Adding Mixed Numbers Horizontally | A) Horizontal Addition with Mixed Numbers - No Regrouping | 4.NF.B.3.a <br> 4.NF.B.3.c <br> 4.NF.B.3.d |
|  | B) Horizontal Addition with Mixed Numbers Regrouping |  |
| 7-7 Subtracting Fractions <br> - No Regrouping | A) Models to Subtract Fractions with Like Denominators | 4.NF.B.3.a <br> 4.NF.B.3.C <br> 4.NF.B.3.d |
|  | B) Subtracting Fractions with Like Denominators |  |
|  | C) Vertical Subtraction with Mixed Numbers - No Regrouping |  |
| 7-8 Subtracting Mixed Numbers Vertically | A) Regrouping to Rewrite Whole and Mixed Numbers | 4.NF.B.3.a <br> 4.NF.B.3.c <br> 4.NF.B.3.d |
|  | B) Vertical Subtraction with Mixed Numbers Regrouping |  |

## Summit of Math: Grade 4 Curriculum

Chapter 7 Fraction Addition and Subtraction (cont.)

| Lesson | Topic | NJSLS |
| :---: | :---: | :---: |
| 7-9 Subtracting Mixed Numbers Horizontally | A) Horizontal Subtraction with Mixed Numbers - No Regrouping | 4.NF.B.3.a <br> 4.NF.B.3.c <br> 4.NF.B.3.d |
|  | B) Horizontal Subtraction with Mixed Numbers Regrouping |  |
| 7-10 Add and Subtract <br> Fractions - Denominators <br> 10 and 100 | A) Models of Equivalent Fractions with Denominators of 10 and 100 | 4.NF.B.3.a <br> 4.NF.B.3.c <br> 4.NF.B.3.d <br> 4.NF.C. 5 |
|  | B) Models to Add Fractions with Different Denominators |  |
|  | C) Models to Subtract Fractions with Different Denominators |  |
| 7-11 Multiplying Whole Numbers and Unit Fractions | A) Multiplication as Repeated Addition | 4.NF.B.4.a <br> 4.NF.B.4.b <br> 4.NF.B.4.c |
|  | B) Fractions as Whole Numbers Times Unit Fractions |  |
|  | C) Multiplying Whole Numbers and Unit Fractions |  |
| 7-12 Multiplying Whole Numbers and Fractions | A) Multiplying Whole Numbers and Fractions | 4.NF.B.4.b <br> 4.NF.B.4.c |
|  | B) Changing Multiplying by a Fraction to Multiplying by a Unit Fraction |  |

## Summit of Math: Grade 4 Curriculum

Chapter 8 Decimals

| Lesson | Topic | NJSLS |
| :---: | :---: | :---: |
| 8-1 Decimal Models Tenths | A) Models of Decimals Less Than One - Tenths | 4.NF.C. 6 |
|  | B) Models of Decimals Greater Than One - Tenths |  |
|  | C) Models of Decimals and Fractions - Tenths |  |
| 8-2 Decimal Models Hundredths | A) Models of Decimals Less Than One - Hundredths | 4.NF.C. 6 |
|  | B) Models of Decimals Greater Than One Hundredths |  |
|  | C) Models of Decimals and Fractions - Hundredths |  |
| 8-3 Decimals on a Number Line - Tenths | A) Number Lines and Decimals - Tenths | 4.NF.C. 6 |
| 8-4 Decimals on a Number Line Hundredths | A) Number Lines and Decimals - Hundredths | 4.NF.C. 6 |
| 8-5 Decimal Place Value | A) Decimal Place Value | 5.NBT.A.3.a |
|  | B) Reading and Writing Decimals |  |
|  | C) Values of Digits in Decimals |  |
| 8-6 Comparing and Ordering Decimals | A) Models to Compare Decimals | 4.NF.C. 7 |
|  | B) Comparing Decimals |  |
|  | C) Ordering Decimals |  |
| 8-7 Decimals and Fractions | A) Writing Decimals as Fractions | 4.NF.C. 6 |
|  | B) Writing Fractions as Decimals |  |

## Summit of Math: Grade 4 Curriculum

Chapter 9 Measurement and Data

| Lesson Topic |  | NJSLS <br> 4.M.A. 1 <br> 4.M.A. 2 |
| :---: | :---: | :---: |
| 9-1 Customary Units of Length | A) Estimating Customary Units of Length |  |
|  | B) Converting Customary Units of Length |  |
| 9-2 Customary Units of Volume | A) Estimating Customary Units of Volume | 4.M.A. 1 <br> 4.M.A. 2 |
|  | B) Converting Customary Units of Volume |  |
| 9-3 Customary Units of Weight | A) Estimating Customary Units of Weight | 4.M.A. 1 <br> 4.M.A. 2 |
|  | B) Converting Customary Units of Weight |  |
| 9-4 Metric Units of Length | A) Estimating Metric Units of Length | 4.M.A. 1 <br> 4.M.A. 2 |
|  | B) Converting Metric Units of Length |  |
| 9-5 Metric Units of Volume and Mass | A) Estimating Metric Units of Volume | 4.M.A. 1 <br> 4.M.A. 2 |
|  | B) Converting Metric Units of Volume |  |
|  | C) Estimating Metric Units of Mass |  |
|  | D) Converting Metric Units of Mass |  |
| 9-6 Units of Time | A) Converting Units of Time | 4.M.A. 1 <br> 4.M.A. 2 |
| 9-7 Elapsed Time | A) a.m. or p.m. | 4.M.A. 1 <br> 4.M.A. 2 |
|  | B) Elapsed Time |  |
| 9-8 Line Plots | A) Line Plots and Data Sets | 4.DL.B. 5 |
|  | B) Interpreting Data in Line Plots |  |

## Summit of Math: Grade 4 Curriculum

Chapter 10 Points, Lines, and Angles

| Lesson | Topic | NJSLS |
| :---: | :---: | :---: |
| 10-1 Points, Lines, and Segments | A) Points and Lines | 4.G.A. 1 |
|  | B) Segments |  |
| 10-2 Parallel and Perpendicular Lines | A) Parallel and Perpendicular Lines | 4.G.A. 1 |
| 10-3 Rays and Angles | A) Rays | 4.G.A. 1 |
|  | B) Angles |  |
| 10-4 Measuring Angles | A) Degrees in a Circle | 4.M.B.4.a <br> 4.M.B.4.b <br> 4.M.B. 5 |
|  | B) Using a Protractor |  |
|  | C) Measuring Angles Starting at Zero |  |
|  | D) Measuring Angles Not Starting at Zero |  |
| 10-5 Constructing Angles | A) Drawing Angles Opening to the Right | $\begin{aligned} & \text { 4.M.B.4.a } \\ & \text { 4.M.B.4.b } \\ & \text { 4.M.B. } 5 \\ & \text { 4.G.A. } 1 \end{aligned}$ |
|  | B) Drawing Angles Opening to the Left |  |
| 10-6 Using Addition and Subtraction to Find Angle Measures | A) Angle Addition | 4.M.B. 6 |

## Summit of Math: Grade 4 Curriculum

Chapter 11 Triangles and Quadrilaterals

| Lesson | Topic | NJSLS |
| :---: | :---: | :---: |
| 11-1 Classifying Triangles | A) Angle Classification | 4.G.A. 2 |
|  | B) Angle Measures to Classify Triangles |  |
| 11-2 Classifying Quadrilaterals | A) Types of Quadrilaterals | 4.G.A. 2 |
| 11-3 Perimeter of Rectangles | A) Perimeter of Squares and Rectangles on a Grid | 4.M.A. 3 |
|  | B) Perimeters of Rectangles |  |
| 11-4 Perimeter of Squares | A) Perimeters of Squares | 4.M.A. 3 |
| 11-5 Area of Rectangles and Squares | A) Areas of Rectangles and Squares Given Figures | 4.M.A. 3 |
|  | B) Areas of Rectangles and Squares Given Descriptions |  |
| 11-6 Lines of Symmetry | A) Identifying Lines of Symmetry | 4.M.A. 3 |
|  | B) Figures with a Given Number of Lines of Symmetry |  |
|  | C) Results of Reflecting Over Lines of Symmetry |  |

