

CURRICULUM OVERVIEW

SPARK Mathematics Grade 4



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Unit 1: Interpreting a Multiplication Equation as a Comparison (4.OA.1)**Assignments**

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| 1. Pre-Test: Interpreting a Multiplication Equation as a Comparison (4.OA.1)* | 3. Post-Test: Interpreting a Multiplication Equation as a Comparison (4.OA.1) |
| 2. Interpreting and Translating Equations, and Applying the Communicative Property (4.OA.1) | 4. Writing Equations from Verbal Statements (4.OA.1)* |

Unit 2: Solving Word Problems Involving Multiplicative Comparison (4.OA.2)**Assignments**

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| 1. Pre-Test: Solving Word Problems Involving Multiplicative Comparison (4.OA.2)* | 3. Post-Test: Solving Word Problems Involving Multiplicative Comparison (4.OA.2) |
| 2. Telling Multiplicative and Additive Comparisons Apart (4.OA.2) | 4. Using Multiplicative Comparisons in Problems Involving Multiplication and Division (4.OA.2)* |

Unit 3: Solving Certain Multi-Step Word Problems (4.OA.3)**Assignments**

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| 1. Pre-Test: Solving Certain Multi-Step Word Problems (4.OA.3)* | 3. Post-Test: Solving Certain Multi-Step Word Problems (4.OA.3) |
| 2. Solving Particular Multi-Step Word Problems (4.OA.3) | 4. Applying Mental Math and Estimation (4.OA.3)* |

Unit 4: Understanding That a Whole Number is a Multiple of Each of Its Factors (4.OA.4)**Assignments**

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| 1. Pre-Test: Understanding that a Whole Number is a Multiple of Each of Its Factors (4.OA.4)* | 3. Post-Test: Understanding that a Whole Number is a Multiple of Each of Its Factors (4.OA.4) |
| 2. Finding Factor Pairs (4.OA.4) | 4. Gaining Familiarity with Factors and Multiples (4.OA.4)* |

Unit 5: Generating Number and Shape Patterns (4.OA.5)**Assignments**

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| 1. Pre-Test: Generating Number and Shape Patterns (4.OA.5)* | 3. Post-Test: Generating Number and Shape Patterns (4.OA.5) |
| 2. Generating Number and Shape Patterns that Follow a Given Rule (4.OA.5) | 4. Identify Features Not Explicit in the Rule Itself (4.OA.5)* |

Unit 6: Recognizing What a Multi-Digit Whole Number Represents (4.NBT.1)**Assignments**

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| 1. Pre-Test: Recognizing What a Multi-Digit Whole Number Represents (4.NBT.1)* | 3. Post-Test: Recognizing What a Multi-Digit Whole Number Represents (4.NBT.1) |
| 2. Recognizing Base 10 Relationships (4.NBT.1) | 4. Interpreting Equations (4.NBT.1)* |

Unit 7: Understanding Place Value in Interpreting and Recording Multi-Digit Whole Numbers (4.NBT.2)**Assignments**

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| 1. Pre-Test: Understanding Place Value in Interpreting and Recording Multi-Digit Whole Numbers (4.NBT.2)* | 4. Translating Numerals to Standard, Word, and Expanded Forms (4.NBT.2)* |
| 2. Interpreting Multi-Digit Whole Numbers Using Base 10 (4.NBT.2) | 5. Understanding Place Value as Applied to Comparing Multi-Digit Numbers (4.NBT.2)* |
| 3. Post-Test: Understanding Place Value in Interpreting and Recording Multi-Digit Whole Numbers (4.NBT.2) | 6. Using Symbols to Record the Results of Comparisons (4.NBT.2)* |

Unit 8: Using Place Value Understanding to Round Multi-Digit Whole Numbers (4.NBT.3)**Assignments**

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| 1. Pre-Test: Using Place Value Understanding to Round Multi-Digit Whole Numbers (4.NBT.3)* | 3. Post-Test: Using Place Value Understanding to Round Multi-Digit Whole Numbers (4.NBT.3) |
| 2. Demonstrating Knowledge of Place Value (4.NBT.3) | 4. Assessing Multi-Digit Whole Numbers and Rounding to a Given Place Value (4.NBT.3)* |

Unit 9: Add and Subtract Multi-Digit Whole Numbers (4.NBT.4)**Assignments**

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| 1. Pre-Test: Add and Subtract Multi-Digit Whole Numbers (4.NBT.4)* | 3. Post-Test: Add and Subtract Multi-Digit Whole Numbers (4.NBT.4) |
| 2. Adding and Subtracting Greater Numbers With and Without Regrouping (4.NBT.4) | 4. Calculating Differences in Numbers with Zeros (4.NBT.4)* |

Unit 10: Multiplying Whole Numbers Up to Four Digits (4.NBT.5)**Assignments**

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| 1. Pre-Test: Multiplying Whole Numbers Up to Four Digits (4.NBT.5)* | 3. Post-Test: Multiplying Whole Numbers Up to Four Digits (4.NBT.5) |
| 2. Multiplying Four-Digit Whole Numbers by One-Digit Whole Numbers, Illustrating Appropriately (4.NBT.5) | 4. Multiplying Two-Digit Whole Numbers, Illustrating the Calculation (4.NBT.5)* |

Unit 11: Analyzing Division Strategies and Finding Whole Number Quotients and Remainders (4.NBT.6)**Assignments**

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| 1. Pre-Test: Analyzing Division Strategies and Finding Whole Number Quotients and Remainders (4.NBT.6)* | 3. Post-Test: Analyzing Division Strategies and Finding Whole Number Quotients and Remainders (4.NBT.6) |
| 2. Dividing Whole Numbers with up to Four-Digit Dividends, Illustrating Appropriately (4.NBT.6) | 4. Understanding Place Value and the Relationship Between Multiplication and Division (4.NBT.6)* |

Unit 12: Explaining Why Fractions Are Equivalent (4.NF.1)**Assignments**

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| 1. Pre-Test: Explaining Why Fractions are Equivalent (4.NF.1)* | 3. Post-Test: Explaining Why Fractions are Equivalent (4.NF.1) |
| 2. Understanding Equal Subdivision of a Fraction, Using Visual Fraction Models (4.NF.1) | 4. Analyzing Differences in Two Equivalent Fractions (4.NF.1)* |

Unit 13: Comparing Fractions With Different Numerators And Different Denominators (4.NF.2)**Assignments**

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| <ol style="list-style-type: none"> 1. Pre-Test: Comparing Fractions with Different Numerators and Different Denominators (4.NF.2)* 2. Exploring and Mastering Various Techniques to Compare Two Fractions (4.NF.2) | <ol style="list-style-type: none"> 3. Post-Test: Comparing Fractions with Different Numerators and Different Denominators (4.NF.2) 4. Using Benchmark Fractions, Calculating Common Denominators, and Analyzing Visual Fraction Models (4.NF.2)* |
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Unit 14: Exploring Addition and Subtraction of Fractions With Like Denominators (4.NF.3)**Assignments**

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| <ol style="list-style-type: none"> 1. Pre-Test: Exploring Addition and Subtraction of Fractions with Like Denominators (4.NF.3)* 2. Deepening Understanding of Fractions and the Composition of Partial Numbers (4.NF.3) 3. Post-Test: Exploring Addition and Subtraction of Fractions with Like Denominators (4.NF.3) | <ol style="list-style-type: none"> 4. Breaking Apart a Sum of Fractions in Various Ways, Including Justifying Equations (4.NF.3)* 5. Exploring Addition and Subtraction of Fractions with Mixed Numbers with Like Denominators (4.NF.3)* 6. Converting Mixed Numbers to Improper Fractions and Solving Word Problems with Mixed Numbers (4.NF.3)* |
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Unit 15: Multiplying a Fraction by a Whole Number (4.NF.4)**Assignments**

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| <ol style="list-style-type: none"> 1. Pre-Test: Multiplying a Fraction by a Whole Number (4.NF.4)* 2. Multiplying a Whole Number and a Fraction (4.NF.4) | <ol style="list-style-type: none"> 3. Post-Test: Multiplying a Fraction by a Whole Number (4.NF.4) 4. Finding Products (4.NF.4)* |
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Unit 16: Working With Base 10 Fractions (4.NF.5)**Assignments**

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| <ol style="list-style-type: none"> 1. Pre-Test: Working with Base 10 Fractions (4.NF.5)* 2. Understanding the Relationship between Fractions and Decimals (4.NF.5) | <ol style="list-style-type: none"> 3. Post-Test: Working with Base 10 Fractions (4.NF.5) 4. Expressing Equivalent Fractions (4.NF.5)* |
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Unit 17: Using Decimal Notation for Fractions (4.NF.6)**Assignments**

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| <ol style="list-style-type: none"> 1. Pre-Test: Using Decimal Notation for Fractions (4.NF.6)* 2. Writing a Fraction with a Denominator of 10 or 100 in Decimal Notation (4.NF.6) | <ol style="list-style-type: none"> 3. Post-Test: Using Decimal Notation for Fractions (4.NF.6) 4. Locating a Given Decimal on a Number Line (4.NF.6)* |
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Unit 18: Comparing Decimals to Hundredths (4.NF.7)**Assignments**

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| <ol style="list-style-type: none"> 1. Pre-Test: Comparing Decimals to Hundredths (4.NF.7)* 2. Comparing Decimals to Hundredths Using Place Value (4.NF.7) | <ol style="list-style-type: none"> 3. Post-Test: Comparing Decimals to Hundredths (4.NF.7) 4. Comparing Decimals to Hundredths Using Hundreds Grids (4.NF.7)* |
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Unit 19: Converting Measures (4.MD.1)**Assignments**

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| 1. Pre-Test: Converting Measures (4.MD.1)* | 3. Post-Test: Converting Measures (4.MD.1) |
| 2. Identifying the Best Unit for Measuring Something (4.MD.1) | 4. Converting a Measure to Smaller Units, and Creating a Table of Conversion (4.MD.1)* |

Unit 20: Using the Four Operations to Solve Word Problems (4.MD.2)**Assignments**

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| 1. Pre-Test: Using the Four Operations to Solve Word Problems (4.MD.2)* | 3. Post-Test: Using the Four Operations to Solve Word Problems (4.MD.2) |
| 2. Solving Word Problems Involving Measurement (4.MD.2) | 4. Recognizing and Converting Units of Measurement (4.MD.2)* |

Unit 21: Looking at Perimeter and Area (4.MD.3)**Assignments**

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| 1. Pre-Test: Looking at Perimeter and Area (4.MD.3)* | 3. Post-Test: Looking at Perimeter and Area (4.MD.3) |
| 2. Applying Formulas for Rectangles in Real-World and Math Problems (4.MD.3) | 4. Using Formulas for Perimeter and Area (4.MD.3)* |

Unit 22: Making a Line Plot (4.MD.4)**Assignments**

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| 1. Pre-Test: Making a Line Plot (4.MD.4)* | 3. Post-Test: Making a Line Plot (4.MD.4) |
| 2. Interpreting Information from a Line Plot (4.MD.4) | 4. Using a Line Plot to Solve Problems (4.MD.4)* |

Unit 23: Identifying Angles (4.MD.5)**Assignments**

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| 1. Pre-Test: Identifying Angles (4.MD.5)* | 3. Post-Test: Identifying Angles (4.MD.5) |
| 2. Identifying the Measure of Angles (4.MD.5) | 4. Measuring Angles (4.MD.5)* |

Unit 24: Measuring Angles in Whole Number Degrees (4.MD.6)**Assignments**

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| 1. Pre-Test: Measuring Angles in Whole Number Degrees (4.MD.6)* | 3. Post-Test: Measuring Angles in Whole Number Degrees (4.MD.6) |
| 2. Using a Protractor (4.MD.6) | 4. Selecting the Correct Angle (4.MD.6)* |

Unit 25: Finding Missing Angle Measures (4.MD.7)**Assignments**

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| 1. Pre-Test: Finding Missing Angle Measures (4.MD.7)* | 3. Post-Test: Finding Missing Angle Measures (4.MD.7) |
| 2. Adding and Subtracting to Find Unknown Angles (4.MD.7) | 4. Finding Unknown Angles with Addition and Subtraction (4.MD.7)* |

Unit 26: Looking at Basic Two-Dimensional Figures (4.G.1)**Assignments**

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|----------------------------------------------------------------|----------------------------------------------------------------|
| 1. Pre-Test: Looking at Basic Two-Dimensional Figures (4.G.1)* | 3. Post-Test: Looking at Basic Two-Dimensional Figures (4.G.1) |
| 2. Drawing and Identifying Points, Lines, and Segments (4.G.1) | 4. Drawing and Identifying Rays and Angles (4.G.1)* |

Unit 27: Classifying Two-Dimensional Figures (4.G.2)**Assignments**

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| 1. Pre-Test: Classifying Two-Dimensional Figures (4.G.2)* | 3. Post-Test: Classifying Two-Dimensional Figures (4.G.2) |
| 2. Sorting a Variety of Polygons (4.G.2) | 4. Using Specific Properties to Categorize (4.G.2)* |

Unit 28: Recognizing Line Symmetry (4.G.3)**Assignments**

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| 1. Pre-Test: Recognizing Line Symmetry (4.G.3)* | 3. Post-Test: Recognizing Line Symmetry (4.G.3) |
| 2. Identifying Two-Dimensional Figures with Line Symmetry (4.G.3) | 4. Identifying and Drawing Lines of Symmetry (4.G.3)* |

(*) Indicates alternative assignment