Unit 1: Whole Numbers, Place Value and Rounding in Computation

Understand multi-digit whole number place value concepts | 4.NBT.1

- Use a place value chart and arrow cards to understand large numbers LZ514
- Model numbers using base ten blocks LZ515
- Understand relationships between digits and their place value LZ516
- Multiply by powers of 10 LZ805
- Divide by powers of 10 LZ806

Read, write, and compare multi-digit whole numbers | 4.NBT.2

- Read and write numbers in numeric form LZ517
- Read and write numbers in word form LZ518
- Read and write numbers in expanded form LZ519
- Read and write numbers with zeros LZ520
- Compare numbers using the symbols <, >, and = LZ521
- Creating numbers based on given conditions by comparing digits LZ522

Round multi-digit whole numbers to any place | 4.NBT.3

- Locate benchmark numbers on a number line LZ523
- Round numbers to the leading digit using a number line LZ524
- Round numbers to a specified place on a number line LZ525
- Round 9's using base ten blocks LZ526
- Round in real-life situations LZ527

Add and subtract using the standard algorithm | 4.NBT.4

- Add using partial sums LZ3121
- Add using an open number line LZ3057
- Add using the standard addition algorithm LZ3122
- Subtract using an open number line LZ3123
- Subtract using the standard subtraction algorithm LZ3160

Unit 2: Multiplication and Division of Whole Numbers

Interpret multiplication as a comparison | 4.OA.1

- The commutative property LZ2357
- Comparing numbers using bar models LZ2569
- See multiplication as a comparison using number sentences LZ2543

Solve word problems using multiplicative comparisons | 4.OA.2

- Compare numbers using additive and multiplicative comparisons LZ2891
- Represent unknown numbers using symbols or letters LZ2744
- Solve multiplicative comparison word problems by using bar models LZ2745
- Solve multiplicative comparison word problems by using a multiplication sentence LZ2746
- Solve multiplicative comparison word problems by using bar models to represent division LZ2851
- Solve multiplicative comparison word problems by using a division sentence LZ2864
- Solve multiplicative comparison word problems using multiplication or division LZ3017

Solve multi-step word problems using the four operations | 4.OA.3

Estimate to assess whether an answer is reasonable LZ3049
Solve word problems using objects LZ2998
Solve word problems by drawing pictures LZ2943
Solve word problems by writing an equation LZ2944
Solve multi-step word problems by writing an equation LZ3079

Find and understand factors and determine if a number is a multiple of a given number for whole numbers 0-100 | 4.OA.4

Find all the factor pairs of a number using area models LZ780
Determine multiples of a number using area models LZ781
Find all factor pairs using a rainbow factor line LZ782
Determine multiples of a number using number bonds LZ783
Use divisibility rules to determine if a number is a multiple of 2, 5, or 10 LZ784
Find all factor pairs of a number using a t-chart LZ785
Determine if a number is prime or composite using area models LZ786
Use divisibility rules to determine if a number is a multiple of 2, 3, or 6 LZ787
Use divisibility rules to determine if a number is a multiple of 4 or 7 LZ788
Determine multiples of a number using a table LZ789
Find multiples by using a number line LZ799

Generate number or shape patterns that follow a given rule and identifying pattern features | 4.OA.5

Find the rule for a function machine using a vertical table LZ790
Understand repeating patterns LZ791
Find missing elements in growing patterns LZ792
Find the 9th shape for a geometric pattern using a table LZ793
Determine the rule in patterns that decrease LZ794
Using a table to find the rule for a geometric triangle pattern LZ795
Generate a pattern sequence using a t-chart LZ797
Find the missing inputs for a function machine using a vertical table LZ798

Multiply multi-digit whole numbers | 4.NBT.5

Use an array to multiply a two digit number by a one digit number LZ1875
Use area models to show multiplication of whole numbers LZ1876
Use place value understanding to multiply three and four digit numbers LZ1878
Use an area model for multiplication of two-digit numbers by two-digit numbers LZ1879
Use an area model to multiply a three digit number by a one digit number LZ1877

Find whole number quotients and remainders with up to four-digit dividends | 4.NBT.6

Divide two-digit dividends using friendly multiples LZ1482
Report remainders as fractions LZ1480
Report remainders as whole numbers by drawing pictures to decide whether to round up or down LZ1481
Divide three-digit dividends LZ1483
Divide four-digit dividends LZ1484

Unit 3: Fraction Equivalents

Understand and explain equivalent fractions using visual models | 4.NF.1

Recognize equivalent fractions using area models LZ616
Recognize equivalent fractions using number lines LZ617
Generate equivalent fractions using area models LZ618
Generate equivalent fractions using number lines LZ619
Generate equivalent fractions by multiplying or dividing by 1 LZ620
Extend a fraction pattern using a number line (OA.5) LZ796

Compare fractions by creating common denominators or numerators (2) | 4.NF.2

Compare fractions using the benchmark fraction ½ LZ1431
Compare fractions using the benchmark of one whole LZ1432
Compare fractions with different denominators using number lines LZ1433
Compare fractions with different denominators using area models LZ1434
Compare fractions with different denominators using set models LZ1435
Compare fractions by creating common denominators LZ1436
Use a number line to represent a fraction greater than one LZ1437
Represent a fraction greater than one using area models LZ1438

Unit 4: Operations with Fractions

Understand addition and subtraction of fractions and decomposing fractions (1) | 4.NF.3a,4.NF.3b

Add fractions by joining parts LZ1421
Subtract fractions by separating parts LZ1422
Decompose fractions LZ1423

Add and subtract mixed numbers with like denominators | 4.NF.3c

Adding mixed numbers by creating equivalent fractions LZ850
Subtracting mixed numbers by creating equivalent fractions LZ851
Adding mixed numbers using properties of operations LZ852
Subtracting mixed numbers by using properties of operations LZ853

Solve word problems involving addition and subtraction of fractions with like denominators | 4.NF.3d

Add fractions with like denominators by decomposing into unit fractions LZ2777
Subtract fractions with like denominators by decomposing LZ2947
Add fractions with like denominators using a number line LZ2898
Subtract fractions with like denominators using a number line LZ2906
Add fractions with like denominators using visual models LZ2866
Subtract fractions with like denominators using visual models LZ2983

Understand multiplication of fractions by whole numbers | 4.NF.4a,4.NF.4b

Represent fractions as the sum of unit fractions using pictures LZ2696
Represent a fraction as the sum of unit fractions using number line LZ2971
Represent a fraction as the sum of unit fractions using an area model LZ3026
Estimate products in multiplication of whole numbers and fractions LZ2927
Use a number line for multiplication of fractions and whole numbers LZ2938
Use a fraction model for multiplication of fractions and whole numbers LZ2939
Use repeated addition for multiplication of fractions and whole numbers LZ3076

Solve word problems involving multiplication of fractions by whole numbers | 4.NF.4c

Solve problems involving a fraction and a whole number using repeated addition LZ2493
Solve problems involving a fraction and a whole number using a number line LZ2832
Solve word problems involving multiplying a fraction and a whole number using a fraction model LZ2845
Solve problems involving multiplying a fraction and a whole number by converting a whole number into a fraction LZ3066

Unit 5: Fractions and Decimals

Express fractions with a denominator of 10 as equivalent to fractions with denominators of 100 | 4.NF.5

Use a number line to show how fractions with denominators 10 and 100 are equivalent LZ2841
Use a grid model to show how fractions with denominators 10 and 100 are equivalent LZ2749
Generate equivalent fractions using a grid model LZ2970
Add fractions with denominators 10 and 100 LZ2975

Use decimal notation for fractions with denominators 10 or 100 | 4.NF.6

Convert decimals to fractions to the tenths place using number lines LZ1424
Convert decimals to fractions to the hundredths place using visual aids LZ1425
Convert fractions to decimals to the tenths place using visual aids and division LZ1426
Convert fractions to decimals to the hundredths place using division LZ1427

Compare two decimals to hundredths | 4.NF.7

Compare two decimals to the hundredths place using fraction models LZ3217
Compare two decimal dollar amounts using coin values LZ3158
Compare two decimals to the hundredths place using a number line LZ3354
Compare two decimal lengths using a ruler LZ3385

Unit 6: Geometry

Draw and identify points, lines, rays, and angles | 4.G.1

Draw points, lines, and line segments LZ2346
Classify and draw various types of angles LZ2395
Draw parallel and perpendicular lines LZ2313
Label and name points, lines, rays and angles using math notation LZ2416
Identify points, lines, rays and angles in a two-dimensional figure LZ2521

Classify two-dimensional shapes, including right triangles, using their properties | 4.G.2

Classify two-dimensional figures by examining their properties LZ2879
Classify triangles by examining their properties LZ3040
Classify right triangles LZ3069
Classify various quadrilaterals by describing their properties LZ2936
Classify quadrilaterals by examining their sides LZ2937
Classify parallelograms by examining their angles and sides LZ2988

Recognize and draw lines of symmetry and line-symmetric figures | 4.G.3

Identify line symmetry in irregular polygons LZ3214
Identify line symmetry in regular polygons LZ3096
Identify line symmetry in a geometric figure LZ3215

Unit 7: Measurement

Know relative sizes of measurement units | 4.MD.1

Compare and convert customary units of length LZ2316
Compare and convert customary units of weight LZ2317
Compare and convert metric units of length LZ2571
Compare and convert metric units of weight LZ2631
Compare and convert metric units of volume LZ2498

Solve word problems involving the conversion of measurement data | 4.MD.2

Convert measurements to solve distance problems LZ2542
Convert measurements to solve volume problems LZ2548
Convert measurements to solve weight problems LZ2551
Convert time units to solve time problems LZ2563
Solve real life problems using operations and measurement conversions LZ3212

Apply formulas for area and perimeter | 4.MD.3

Use area models to find the area of rectanglesLZ2374
Find the area of a rectangle using the standard formula LZ2535
Find missing side lengths using the formula for area LZ2425
Find the perimeter of a rectangle using an area model LZ2942
Find perimeter using the standard formula LZ3047
Find missing side lengths using the formula for perimeter LZ3048

Create line plots to display data and use line plots to solve problems | 4.MD.4

Create a line plot using a data set of fractional measures LZ3303
Interpret data on a line plot by making observations LZ3476
Solve addition problems using data from line plots LZ3382
Solve subtraction problems using data from line plotsLZ3492
Solve word problems by creating and interpreting line plots LZ3494

Understand angles and concepts of angle measurement | 4.MD.5a,4.MD.5b

Measure full and half rotations LZ2633
Measure quarter and three-quarter rotations LZ2635
Understand and measure one-degree angles LZ2586
Estimate the measure of an angle using benchmark and one-degree angles LZ2766
Solve real world problems involving angle measurement LZ2616

Measure and sketch angles using a protractor | 4.MD.6

Introduction to protractors LZ2907
Measure angles to the nearest 10 by reading a protractor LZ3010
Measure angles to the nearest degree with protractors LZ2973
Sketch angles that are multiples of 10 degrees using a protractor LZ2913
Sketch angles that are not multiples of 10 degrees using a protractor LZ3101

Recognize angle measure as additive | 4.MD.7

Compose and decompose angles LZ3270
Understand that angle measure is additive by decomposing LZ3253
Find unknown angles using angle properties LZ3254
Find unknown angles using diagrams LZ3402
Write an equation to solve for a missing angle measure LZ3403