



## *Prep for Math and Dosage*

This course covers the topics outlined below. You can customize the scope and sequence of this course to meet your curricular needs.

### Curriculum (112 topics)

- Whole Numbers (36 topics)
  - ◆ Place Value (2 topics)
    - ◇ Whole number place value: Problem type 1
    - ◇ Numeral translation: Problem type 1
  - ◆ Adding and Subtracting Whole Numbers (11 topics)
    - ◇ Adding a 2–digit number and a 1–digit number with regrouping
    - ◇ Adding 2–digit numbers without regrouping
    - ◇ Adding 2–digit numbers with regrouping a ten
    - ◇ Adding with regrouping a hundred
    - ◇ Addition of large numbers
    - ◇ Subtracting a 1–digit number from a 2–digit number
    - ◇ Subtraction of 2–digit numbers without regrouping
    - ◇ Subtraction of 2–digit numbers with regrouping
    - ◇ Adding or subtracting 10, 100, or 1000
    - ◇ Subtraction with multiple regrouping steps
    - ◇ Subtraction and regrouping with zeros
  - ◆ Multiplying and Dividing Whole Numbers (16 topics)
    - ◇ One–digit multiplication
    - ◇ Multiplication by 10, 100, and 1000
    - ◇ Multiplying 2–digit and 1–digit numbers without regrouping
    - ◇ Multiplying with regrouping
    - ◇ Introduction to multiplication of large numbers
    - ◇ Multiplication with trailing zeros: Problem type 1
    - ◇ Multiplication with trailing zeros: Problem type 2
    - ◇ Multiplication of large numbers
    - ◇ Division facts
    - ◇ Division without regrouping
    - ◇ Division with regrouping
    - ◇ Division with trailing zeros: Problem type 1
    - ◇ Division with trailing zeros: Problem type 2
    - ◇ Division with remainder involving quotients with intermediate zeros: Problem type 2
    - ◇ Quotient with remainder: 1–digit divisor, 2–digit dividend
    - ◇ Quotient with remainder: 1–digit divisor, 3–digit dividend
  - ◆ Rounding (2 topics)
    - ◇ Rounding to tens or hundreds
    - ◇ Rounding to thousands, ten thousands, or hundred thousands
  - ◆ Factors and Divisibility Rules (5 topics)
    - ◇ Divisibility rules for 2, 5, and 10
    - ◇ Divisibility rules for 3 and 9
    - ◇ Prime numbers

- ◇ Greatest common factor of 2 numbers
- ◇ Least common multiple of 2 numbers
- Fractions and Mixed Numbers (32 topics)
  - ◆ Equivalent Fractions (5 topics)
    - ◇ Introduction to fractions
    - ◇ Understanding equivalent fractions
    - ◇ Equivalent fractions
    - ◇ Introduction to simplifying a fraction
    - ◇ Simplifying a fraction
  - ◆ Mixed Numbers (3 topics)
    - ◇ Writing a mixed number and an improper fraction for a shaded region
    - ◇ Writing an improper fraction as a mixed number
    - ◇ Writing a mixed number as an improper fraction
  - ◆ Ordering and Plotting Fractions (5 topics)
    - ◇ Ordering fractions with the same denominator
    - ◇ Ordering fractions with the same numerator
    - ◇ Using a common denominator to order fractions
    - ◇ Fractional position on a number line
    - ◇ Plotting fractions on a number line
  - ◆ Adding and Subtracting Fractions and Mixed Numbers (8 topics)
    - ◇ Addition or subtraction of fractions with the same denominator
    - ◇ Addition or subtraction of unit fractions
    - ◇ Introduction to addition or subtraction of fractions with different denominators
    - ◇ Addition or subtraction of fractions with different denominators
    - ◇ Addition or subtraction of mixed numbers with the same denominator
    - ◇ Mixed number addition with the same denominator and renaming
    - ◇ Mixed number subtraction with the same denominator and renaming
    - ◇ Addition or subtraction of mixed numbers with different denominators
  - ◆ Multiplying and Dividing Fractions and Mixed Numbers (11 topics)
    - ◇ Product of a unit fraction and a whole number
    - ◇ Product of a fraction and a whole number: Problem type 1
    - ◇ Introduction to fraction multiplication
    - ◇ Fraction multiplication
    - ◇ The reciprocal of a number
    - ◇ Division involving a whole number and a fraction
    - ◇ Fraction division
    - ◇ Complex fraction without variables: Problem type 1
    - ◇ Mixed number multiplication: Problem type 1
    - ◇ Mixed number multiplication: Problem type 2
    - ◇ Mixed number division
- Decimals (23 topics)
  - ◆ Decimal Place Value (6 topics)
    - ◇ Writing a decimal and a fraction for a shaded region
    - ◇ Decimal place value: Tenths and hundredths
    - ◇ Decimal place value: Hundreds to ten thousandths
    - ◇ Rounding decimals
    - ◇ Introduction to ordering decimals
    - ◇ Ordering decimals
  - ◆ Converting between Decimals and Fractions (7 topics)
    - ◇ Converting a decimal to a fraction: Basic
    - ◇ Converting a decimal to a proper fraction in simplest form: Advanced
    - ◇ Converting a fraction with a denominator of 10, 100, or 1000 to a decimal
    - ◇ Converting a fraction to a terminating decimal

- ◇ Converting a fraction to a repeating decimal
  - ◇ Converting a decimal to a mixed number
  - ◇ Converting a mixed number to a decimal
- ◆ Adding and Subtracting Decimals (3 topics)
  - ◇ Addition of aligned decimals
  - ◇ Decimal addition with 3 numbers
  - ◇ Subtraction of aligned decimals
- ◆ Multiplying and Dividing Decimals (7 topics)
  - ◇ Multiplication of a decimal by a power of ten
  - ◇ Multiplying a decimal by a whole number
  - ◇ Decimal multiplication: Problem type 1
  - ◇ Division of a decimal by a power of ten
  - ◇ Division of a decimal by a whole number
  - ◇ Division of a decimal by a 2–digit decimal
  - ◇ Word problem with powers of ten
- Percents, Ratios, and Proportions (7 topics)
  - ◆ Percents (4 topics)
    - ◇ Finding the percentage of a grid that is shaded
    - ◇ Converting between percentages and decimals
    - ◇ Converting a percentage to a fraction in simplest form
    - ◇ Converting a fraction to a percentage: Denominator of 20, 25, or 50
  - ◆ Ratios (1 topics)
    - ◇ Writing a ratio as a percentage
  - ◆ Proportions (2 topics)
    - ◇ Writing a ratio proportion as a fraction proportion
    - ◇ Finding the missing value in a proportion
- Measurements and Conversions (14 topics)
  - ◆ Customary Measurements (8 topics)
    - ◇ Choosing U.S. Customary measurement units
    - ◇ U.S. Customary unit conversion with whole number values
    - ◇ Conversions involving measurements in feet and inches
    - ◇ Adding measurements in feet and inches
    - ◇ U.S. Customary unit conversion with whole number values: Two–step conversion
    - ◇ U.S. Customary unit conversion with mixed number values: One–step conversion
    - ◇ U.S. Customary unit conversion with mixed number values: Two–step conversion
    - ◇ U.S. Customary area unit conversion with whole number values
  - ◆ Metric System (4 topics)
    - ◇ Metric distance conversion with whole number values
    - ◇ Metric mass or volume conversion with whole number values
    - ◇ Metric distance conversion with decimal values
    - ◇ Metric conversion with decimal values: Two–step problem
  - ◆ Converting Units (1 topics)
    - ◇ Converting units
  - ◆ Temperature (1 topics)
    - ◇ Converting between temperatures in Fahrenheit and Celsius