MATHEMATICS YEAR

Fractions

- Expressing fractions in lowest terms
- Adding and subtracting fractions with like denominators
- Finding the least common denominator for a pair of fractions
- Finding equivalent fractions using multiples and factors
- Comparing and ordering fractions and mixed numbers
- Adding and subtracting fractions with unlike denominators
- Expressing mixed numbers as improper fractions and vice versa
- Adding and subtracting mixed numbers with like and unlike denominators
- Adding and subtracting whole numbers, fractions, and mixed numbers

Geometry

- Identifying the center, radius, diameter, and circumference of a circle
- Constructing a circle with a given radius
- Measuring angles using a protractor



Graphing

- Constructing and solving word problems involving line graphs and bar graphs
- Drawing circle graphs and solving related word problems

Multiplication and Division

- Identifying and using the inverse operation for multiplication
- Using the distributive property to find products
- Identifying and using the rules of divisibility for 2, 3, 4, 5, 6, 8, 9, and 10
- Multiplying fractions by fractions, whole numbers, and mixed numbers
- Multiplying multi-digit numbers
- Multiplying by multiples of 10 and 100
- Dividing a three-digit number by a multiple of 10
- Dividing a three-digit number by a two-digit number with no zeros in the divisor
- Dividing a four-digit number by a two-digit number

Numbers

- Identifying the place value and value of each digit in numerals through the billions
- Comparing and ordering numbers through the billions
- Rounding to the nearest millions and billions
- Using estimation strategy of compatible numbers and computational strategy of compensations
- Listing prime and composite numbers less than 50
- Listing factors of two whole numbers each of which is less than 100
- Finding the least common multiple of two whole numbers
- Writing Roman numerals through 2,000
- Completing complex picture or number patterns





- Linear metric units and related addition or subtraction problems
- Metric units of capacity and related addition or subtraction problems
- · Metric units of mass
- Customary linear units, units of capacity, and units of mass
- Selecting appropriate units of measure for length, area, and mass

Problem Solving

- Selecting the appropriate operation and strategy to solve word problems
- Solving problems using basic graphs, charts, and tables
- Identifying relevant and irrelevant information in a word problem
- Solving basic, one-step equations
- Solving problems using a given formula

Time and Money

- •Computing basic operations with units of time, including the basic concept of time zones
- •Adding and subtracting decimal amounts to hundredths
- Calculating amounts of money up to \$1000
- Multiplying with two digits and dividing using three-digit numbers
- •Converting meters into centimeters or kilometers to meters
- •Telling time by comparing the 12-hour clock to the 24-hour clock
- •Measuring angles up to 90 degrees using an angle protractor
- •Displaying and collecting data using broken-line graphs

