

# Numbers and Operations—Fractions

## Grade 4

### Vocabulary Words

#### Your Student Will Learn

**Denominator:** The number below the bar in a fraction that tells how many equal parts are in the whole

**Compare:** Tell how a number is related to another number using  $<$ ,  $>$ , or  $=$ .

**Numerator:** The number above the bar in a fraction that tells how many parts of the whole

**Unit Fraction:** one piece of the whole represented as  $\frac{1}{a}$ .

**Equivalent:** ( $=$ ) having the same value

**Decimal:** A number system (based on 10) with one or more digits to the right of the decimal point.

**Mixed Number:** A number that is made up of a whole number and a fraction

**Decimal Point:** A symbol that separates dollars and cents in money, and the ones place from the tenths place in decimal numbers.

### What Your Student Will Learn:

- ◆ Understand equivalent fractions.
- ◆ Compare fractions with symbols  $>$ ,  $<$ , or  $=$ .
- ◆ Add and subtract fractions, including mixed numbers with like denominators.
- ◆ Decompose a fraction into a sum of fractions with the same denominator in more than one way. Ex:  $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$ ;  $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$ ;  $2 \frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$ .
- ◆ Add and subtract fractions to solve word problems.
- ◆ Multiply a fraction by a whole number. Ex:  $3 \times \frac{2}{5} = \frac{2}{5} + \frac{2}{5} + \frac{2}{5}$ .
- ◆ Understand a fraction is a multiple of a unit fraction. Ex:  $\frac{5}{4}$  as the product of  $5 \times (\frac{1}{4})$ .
- ◆ Multiply a fraction by a whole number to solve word problems.
- ◆ Express and add fractions with denominators 10 and 100.
- ◆ Read, write, and represent decimal notation for fractions with denominators 10 or 100.
- ◆ Compare two decimals to hundredths using symbols  $>$ ,  $<$ , or  $=$  and justify the conclusions.

### Everyday Activities You Can Do At Home:

- ◆ Draw different shapes. Divide them into different fractions.
- ◆ Create numbers to use in fractions. Draw these fractions as parts of a whole or set.
- ◆ Use measuring cups when baking or cooking.
- ◆ Use centimeter paper to draw decimals.
- ◆ Relate dimes to tenths and pennies to hundredths and make up decimals using dimes and pennies.
- ◆ Use a menu to compare money.
- ◆ Roll dice to make decimal numbers and compare them.
- ◆ Write decimal numbers in expanded form.
- ◆ Write decimal numbers in word form.
- ◆ Identify decimals in a newspaper.
- ◆ Practice multiplication and division facts.