5.1 Using Equivalent Fractions to Find Common Denominators
Vocabulary

Equivalent Fraction- Fractions that name the same number and have the same value.

Multiplication Rule for Equivalent Fractions- To generate fractions that are equivalent to a given fraction, multiply the numerator and the denominator by the same number.

Common Denominator- A non zero number that is a multiple of the denominators of two or more fractions. A multiple is the product of the two numbers being multiplied together. The denominator represents how many equal parts.

Strategies for Finding Equivalent Fractions

- **Exchange fraction circle pieces.** For example, to find fractions equivalent to ½, find fraction circle pieces that completely cover the pink ½ piece. Two yellow ¼ pieces cover one pink ½ piece, so 2/4 is equivalent to ½.
- Use the **multiplication rule for equivalent fractions**. To generate fractions that are equivalent to a given fraction, multiply the numerator and the denominator by the same non zero number.

For example:

$$\frac{3 \times 2 = 6}{5 \times 2 \quad 10}$$

What you do to the numerator (top number) you MUST do to the denominator (bottom number). If you multiple the numerator by 2 then you must mulitply the denominator by 2.

When fractions are renamed with the same denominator, the denominator is called a common denominator for the fractions. "Common denominator" means "same denominator."