April 2019: Supporting the Understanding of Fractions at Home

Understanding fractions is essential for success in mathematics. There are many ways that we can support this understanding at home. When learning about fractions, it is helpful to focus on **benchmark fractions** e.g. halves, quarters, eighths, thirds, fifths and tenths. Consider incorporating the following activities into your children's learning.

What is a fraction?
A fraction simply represents a number. For example, look at the number line below. What fractions represent the same portion of the whole? Which fractions are closer to 0?

Curriculum Note

The concept of Numerator and Denominator are **NOT** introduced **until Grade 4**. Students from **FDK- Gr.3 are exposed to Fractional WORDS, IMAGES and use MATH TOOLS to develop meaning about fractions.**
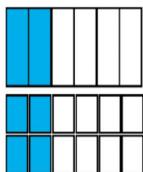
4 Ways to Support Your Child's Understanding of Fractions

1. **Set Model** - the denominator(bottom #), represents the the total number of parts in the whole. The numerator (top#), is any smaller part within the whole
2. **Area Model** - the space inside the shape is the whole. The area is divided into parts of the whole shape.
3. **Volume Model** - a 3D container represents the whole. The whole is divided into portions of the whole container.
4. **Linear model/Number Line** - This model helps students understand fractions by **comparing** them to **other fraction**s, **0 and 1**.
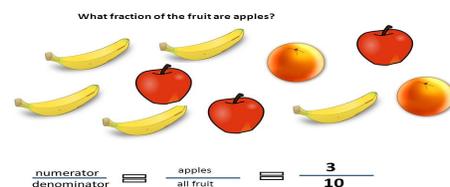
Example: Volume model

Example: Area model

Dividing the Set

This example, looks at relationship between the number of

What fraction of the fruit are apples?

$$\frac{numerator}{denominator} = \frac{apples}{all\ fruit} = \frac{3}{10}$$

apples to the all of fruit. What is the fraction for oranges to all of the fruit?

Dividing Whole Objects into Equal parts using Money
Benchmarks of a quarter, a half, three quarters in relation to other fraction sets; in this example a fraction set of quarters related to dimes as tenths and shows that 5/10 is equal to 1/2. What is the whole? How many quarters/dimes make up one and a half, or two wholes?
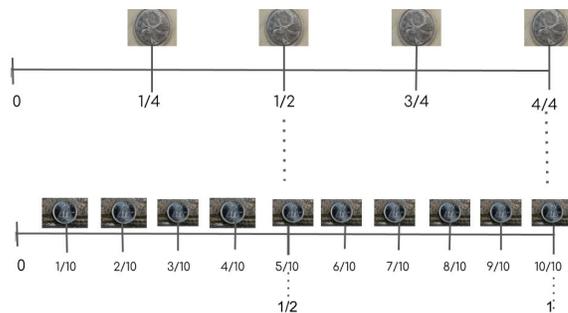
Time and Fractions
When teaching your child about telling time, why not teach them about fractions too! By separating the clock into halves and quarters, students can see how each ¼ hr is 15 minutes of time.
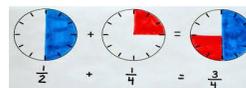
Cooking with a Common Unit - Juice Pops Recipe
Make some healthy juice pops with your child using only the ¼ or the ½ measuring cup.

Makes 8 servings
Mix 2 cups of orange juice with 2 cups of cranberry juice. Then pour the mixture into 5 ounce wax cups, put in wooden craft stick as it starts to freeze. Wait ½ hour. Enjoy!