

### Further investigations:

Drop a handful of pennies (or other coins) on a table. Ask your child, "How many coins landed heads-up? How many coins landed tails-up? What fraction of the total coins is heads-up? What fraction is tails-up?"

Make a favorite recipe with your child. Help your child do the measuring.

Try these No-Bake Cookies:

3 ½ tablespoons butter

4 tablespoons golden syrup

4 ounces semisweet chocolate, chopped

2 ¾ cups cornflakes cereal

In a saucepan over low heat, combine the butter, golden syrup and chocolate. Cook and stir until butter and chocolate have melted and everything is well blended. Mix in the cornflakes cereal.

Drop by heaping spoonfuls onto waxed paper or a buttered baking sheet. Place in the refrigerator until set, about 15 minutes.

Make a pan of brownies and let your child share them equally with your family or friends. Ask your child what fraction of the total batch each person will get.

Empty a small bag of M&M's, Skittles, or other type of candy on a table. Allow your child to estimate what fractions of the candies are red, yellow, green, orange, and brown. Help him separate the colors and determine the correct fraction for each color.

### Terminology:

**Denominator:** the bottom number of a fraction that tells how many equal parts are in a whole or set

**Numerator:** the top number of a fraction that tells how many of the equal parts are being described

**Third:** one of three equal parts

**Sixth:** one of six equal parts

**Eighth:** one of eight equal parts

**Tenth:** one of ten equal parts

### Related Files:

[www.ceismc.gatech.edu/csi](http://www.ceismc.gatech.edu/csi)

### Parts of a Whole

#### Students will:

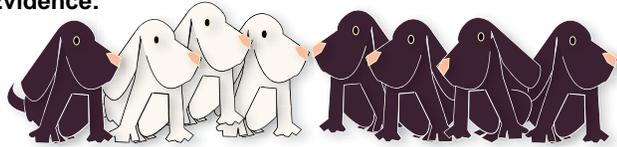
- Identify and represent the fractional parts of a whole or of a set
- Recognize that the denominator determines the number of equal sized pieces that make up a whole, and represent this concept
- Recognize that the numerator determines how many pieces of the whole are being referred to in the fraction, and represent this concept
- Represent and compare fractions with easy denominators of 3, 6, 8, and 10 using concrete and pictorial models

#### Second Grade 5 of 7

#### Classroom Cases:

1. Kim's dog had eight puppies. Five of the puppies are dark brown, the rest of them are white. What fraction of the puppies is dark brown? What fraction of the puppies is white?

#### Case Closed - Evidence:



There are 8 puppies in all so  $\frac{5}{8}$  of the puppies are dark brown and  $\frac{3}{8}$  of the puppies are white.

2. You and your two best friends are going to share a chocolate bar. How could you share the chocolate bar so everyone has an equal share? What fraction of the chocolate bar would each person get to eat? Use pictures, words and numbers to explain your answer.

#### Case Closed - Evidence:

Since there are three of us altogether, there would need to be three equal shares. That means that the denominator will be 3. Each one of us would get one share, so the top number, the numerator, will be 1. Each of us will get  $\frac{1}{3}$  of the chocolate bar.

3. Your big brother bought a pizza. He said you can have either  $\frac{2}{3}$  or  $\frac{3}{6}$  of the pizza. Which would you choose? Why? Use pictures, words, and numbers to explain your answer.

#### Case Closed - Evidence:

I love pizza, so I would choose to eat  $\frac{2}{3}$  of it because  $\frac{2}{3} > \frac{3}{6}$ .



#### Book 'em:

**Eating Fractions** by Bruce McMillan

**Fraction Action** by Loreen Leedy

**Fraction Fun** by David A. Adler

**Gator Pie** by Louise Mathews