

# Fractions

## Summary

Students will investigate fractions by creating fraction strips.

## Main Core Tie

Mathematics Grade 3

[Strand: NUMBER AND OPERATIONS - FRACTIONS \(3.NF\) Standard 3.NF.1](#)

## Additional Core Ties

Mathematics Grade 3

[Strand: NUMBER AND OPERATIONS - FRACTIONS \(3.NF\) Standard 3.NF.3](#)

## Materials

Scissors

Black crayon

Ruler in inches

Envelope or plastic Ziploc bag

- [Order the Fractions, Fraction War, and Fraction Concentration game cards](#) (pdf)

- [My Book About Fractions](#) (pdf)

Fraction strips

## Additional Resources

### *Books*

- *Eating Fractions*

, by Bruce McMillan; ISBN 0-590-43771-2

- *Give Me Half*

, by Stuart J. Murphy; ISBN 0-066-446701-5

- *The Hershey's Milk Chocolate Bar Fractions Book*

, by Jerry Pallotta; ISBN 0-439-13519-2

- *Cook-a-doodle-doo!*

, by Janet Stevens and Susan Stevens Crummel; ISBN 0-15-201924-3

## Background for Teachers

With students, make fraction strips (1-1/2 inch) from 9" x 12" construction paper in red (whole), orange (half), yellow (thirds), green (fourths), blue (sixths), and purple (eighths) for each student using rulers and black crayons.

## Intended Learning Outcomes

1. Demonstrate a positive learning attitude toward mathematics.
2. Become mathematical problem solvers.

## Instructional Procedures

### Invitation to Learn

Who can tell me what a fraction is?

A fraction is a part of a whole.

Today we are going to do some investigating with fractions. But before we do, we need to make our own fraction strips.

## Instructional Procedures

Pass out the 1-1/2" x 12" strip of red construction paper. Have the students write 1 whole on the strip with a black crayon.

Pass out the 1-1/2" x 12" strips of orange construction paper. Measure or fold in half. (Half of 12 inches is what?" Six inches.) With a black crayon write  $\frac{1}{2}$  on each of the two strips. Cut strip in half.

Pass out the 1-1/2" x 12" strips of yellow. Divide 12 inches into thirds (4") and mark the strips with a black crayon. Write  $\frac{1}{3}$  on each piece and cut strip on lines.

Pass out the 1-1/2" x 12" strips of green construction paper. Have the students divide into fourths (3"). Write  $\frac{1}{4}$  on each piece and cut strips on the lines.

Pass out the 1-1/2" x 12" strips of blue construction paper. Divide into sixths (2"). Write  $\frac{1}{6}$  on each piece and cut the strip on the lines.

Pass out the 1-1/2" x 12" strips of purple construction paper. Divide into eighths (1-1/2"). Write  $\frac{1}{8}$  on each piece and cut on the lines to make strips.

Students will use the strips to play *Order the Fractions* and *Fraction War*.

After playing the games, discuss how the students knew which fraction was larger,  $\frac{1}{2}$  or  $\frac{1}{3}$ ? They should discover that the larger the denominator, the smaller the piece.

## Extensions

### Family Connections

#### *Cook-a-doodle-doo!*

by Janet Stevens and Susan Stevens Crummel Parents can cook the strawberry shortcake by doubling the recipe and adding fractions.

### Assessment Plan

Have students complete *My Book About Fractions* to assess whether they gained conceptual understanding of fractions.

With two dice, have the students roll fractions—red = numerator, green = denominator—and draw pictures to illustrate fraction of a set or whole.

## Authors

[Utah LessonPlans](#)