

Unit 7: Fractions

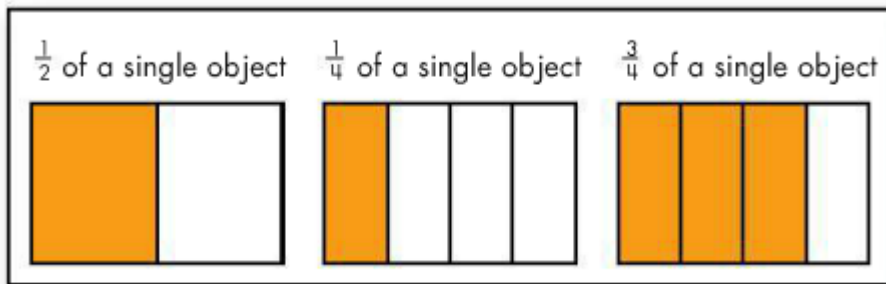
The PreK-12 Mathematics curriculum focuses on problem solving, communication, and critical thinking in order to provide a foundation where every student reaches their potential to become a globally competitive, mathematically literate citizen.

About this Unit

Students investigate what fractions are and the many ways they can be represented and used. They identify fractions of a single object (1/2 of a square, 1/4 of a rectangle, etc.) as well as find fractions of a set (1/2 of 12). Students begin to learn how fractions are expressed in words and represented using fraction notation.

Understanding Fractions

Students focus on finding equal parts of a whole and naming the fractional parts. For example, one-half is one of two equal parts. Students will identify fractional parts of a region.



Fractions of a Group

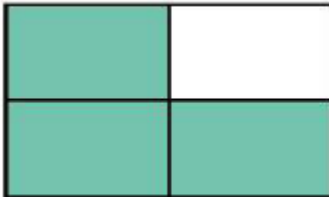
Fractions can also be thought of in terms of parts of sets or groups. For example, one-half of a bunch of 12 balloons or one-third of a jar of 15 pennies.

Linda and Ebony's friend gave them 16 pens.

4. Can each girl get half? _____
5. How many pens does Linda get? _____
6. How many pens does Ebony get? _____

Using Terms and Notation

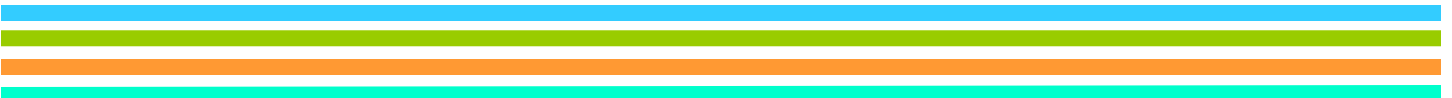
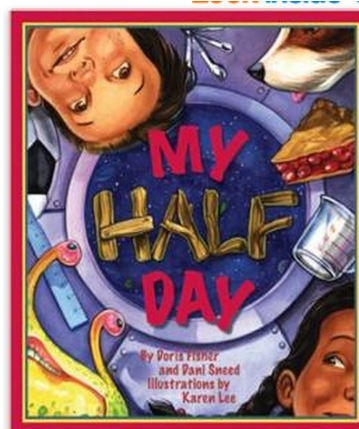
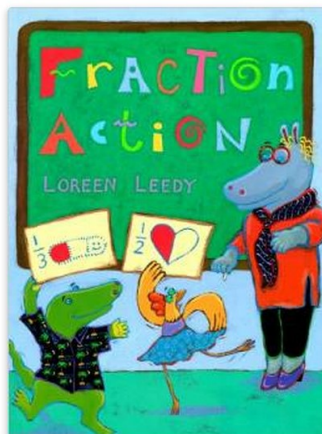
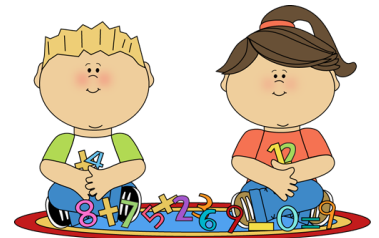
In this unit, students learn how fractions are expressed in words (one-half, two-thirds) and with numbers ($1/2$, $2/3$). Students must identify fractions in different contexts. They may have to fold paper squares, color in Fraction Flags, or share sets of objects in equal groups. They learn the numerator (top number) is the number of parts that are shaded and the denominator (bottom number) represents the total number of parts.



$\frac{3}{4}$ ← numerator
 $\frac{3}{4}$ ← denominator

Helping Your Child at Home

- Give your child pieces of paper and have them fold the paper into fractional parts. For example, a rectangle could be divided into fourths three different ways.
- Give your child a set of objects and have them divide them into equal sets. 24 pennies could be divided into: halves- 2 groups of 12, thirds- 3 groups of 8, or fourths- 4 groups of 6.
- Read books about fractions.



Visit These Websites for Interactive Math Activities

- [Matching Fractions](http://www.sheppardsoftware.com/mathgames/fractions/fractionSet.htm) (http://www.sheppardsoftware.com/mathgames/fractions/fractionSet.htm)
Students practice matching fractions up to a whole.
- [Soft Schools](http://www.softschools.com/math/fractions/games/) (http://www.softschools.com/math/fractions/games/)
Students can take a whole pizza and divide it into given fractional parts.
- [Building Bridges](http://www.mathplayground.com/FractionGame/FractionGame.html) (http://www.mathplayground.com/FractionGame/FractionGame.html)
Students can use fractions to build a bridge.
- [Bang On Time](http://www.oswego.org/ocsd-web/games/BangOnTime/clockwordres.html) (http://www.oswego.org/ocsd-web/games/BangOnTime/clockwordres.html)
Students practice telling time on a clock by stopping the hands at a designated time. Times are written in a variety of ways.

