



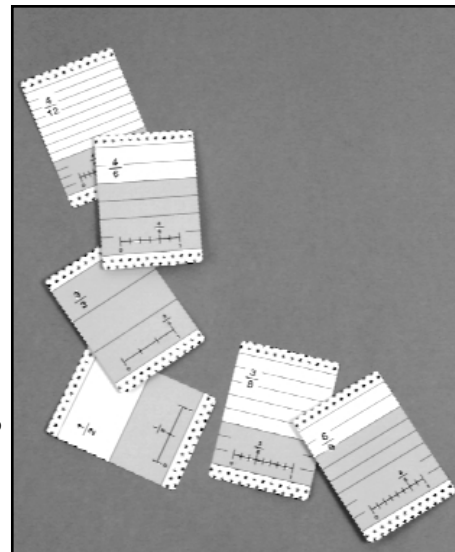
Unit 8: Fractions

Unit 8 has two primary objectives:

- to review the uses of fractions and fraction notation
- to help children develop a solid understanding of equivalent fractions, or fractions that have the same value

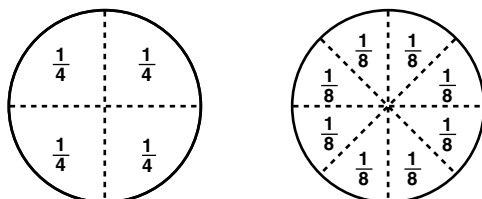
The second objective is especially important, because understanding equivalent fractions will help children compare fractions and, later, calculate with fractions.

Children will build their understanding of equivalent fractions by working with Fraction Cards and name-collection boxes. Fraction Cards are shaded to show a variety of fractions.



Name-collection boxes contain equivalent names for the same number. For example, a $\frac{1}{2}$ name-collection box can contain fractions like $\frac{2}{4}$, $\frac{3}{6}$, and $\frac{4}{8}$, and the decimal 0.50.

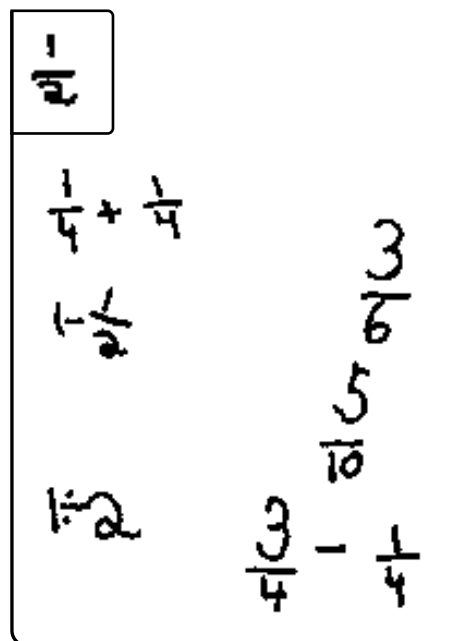
Children will also generate lists of equivalent fractions by folding circles and rectangles into different numbers of equal parts.



Throughout this unit, children will make up and solve number stories involving fractions in everyday contexts. They will solve number stories about collections of real-world objects, such as crayons, books, and cookies.

Finally, children will begin to name quantities greater than 1 with fractions, such as $\frac{3}{2}$ and $\frac{5}{4}$, and with mixed numbers, such as $2\frac{1}{3}$.

Please keep this Family Letter for reference as your child works through Unit 8.



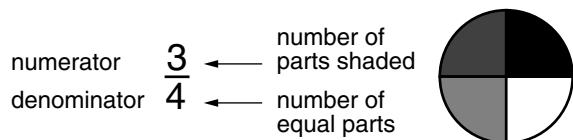
Vocabulary

Important terms in Unit 8:

fraction A number in the form $\frac{a}{b}$ used to name part of a whole object or part of a whole collection of objects.

denominator The number of equal parts into which the whole is divided. It is the number written below the bar in a fraction. For example, in the fraction $\frac{3}{4}$, 4 is the denominator.

numerator The number of equal parts of the whole being considered. It is the number written above the bar in a fraction. For example, in the fraction $\frac{3}{4}$, 3 is the numerator.



equivalent fractions Fractions that have different numerators and denominators but name the same amount. For example, $\frac{1}{2}$, $\frac{2}{4}$, $\frac{10}{20}$, and $\frac{5}{10}$ are equivalent fractions.

mixed number A name for a quantity consisting of a whole number and a fraction, such as $2\frac{1}{3}$.

Building Skills through Games

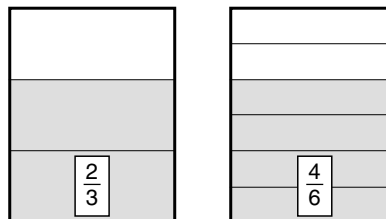
In Unit 8, your child will practice multiplication skills and build his or her understanding of fractions by playing the following games. For detailed instructions, see the *Student Reference Book*.

Baseball Multiplication

Players use multiplication facts to score runs. Team members take turns “pitching” by rolling two dice to get two factors. Then players on the “batting” team take turns multiplying the two factors and saying the product.

Equivalent Fractions Game

Players take turns turning over Fraction Cards and try to find matching cards that show equivalent fractions.



Fraction Top-It

Players turn over two Fraction Cards and compare the shaded parts of the cards. The player with the larger fraction keeps all the cards. The player with more cards at the end wins!

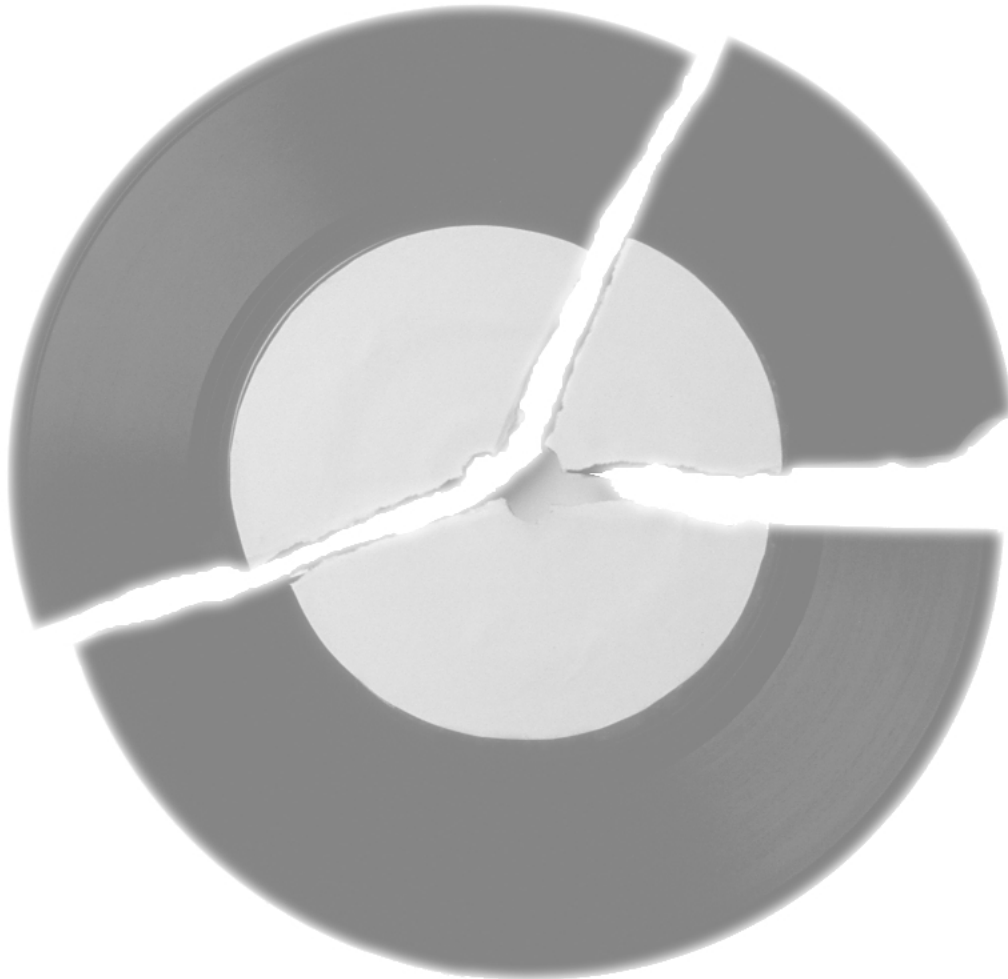
Multiplication Bingo

Players take turns calling out the products of two numbers. If that number appears on their Multiplication Bingo Cards, they put a penny on that number. The first player to get 4 pennies in a row, column, or diagonal calls out “Bingo!” and wins the game.

Do-Anytime Activities

To work with your child on the concepts taught in this unit and in previous units, try these interesting and rewarding activities:

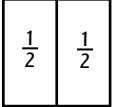
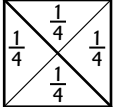
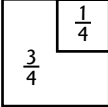
- 1 Help your child find fractions in the everyday world—in advertisements, on measuring tools, in recipes, and so on.
- 2 Count together by a 1-digit number. For example, start at 0 and count by 7s.
- 3 Dictate 5-, 6-, and 7-digit numbers for your child to write, such as “thirteen thousand, two hundred forty-seven” (13,247) and “three million, two hundred twenty-nine thousand, eight hundred fifty-six” (3,229,856). Also, write 5-, 6-, and 7- digit numbers for your child to read to you.
- 4 Practice extended multiplication and division facts, such as $3 \times 7 = \underline{\quad}$, $30 \times 7 = \underline{\quad}$, and $300 \times 7 = \underline{\quad}$; similarly, $18 \div 6 = \underline{\quad}$, $180 \div 6 = \underline{\quad}$, and $1,800 \div 6 = \underline{\quad}$.



As You Help Your Child with Homework

As your child brings home assignments, you may want to go over the instructions together, clarifying them as necessary. The answers listed below will guide you through this unit's Home Links.

Home Link 8.1

1.  2.  3. 
4. $\frac{5}{7}$ 5. $\frac{9}{10}$ 6. $\frac{1}{4}$
7. 0, or $\frac{0}{4}$ 8. $\frac{3}{4}$ 9. $\frac{1}{2}$

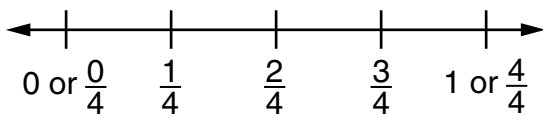
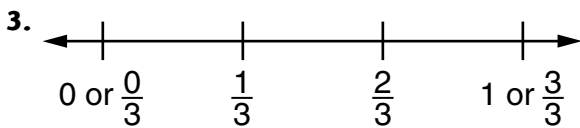
Home Link 8.2

1. 7 cards 2. 3 pencils 3. $\frac{1}{4}$, or $\frac{10}{40}$ 4. $\frac{1}{5}$, or $\frac{10}{50}$



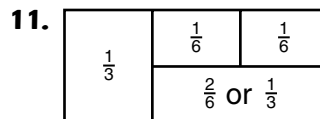
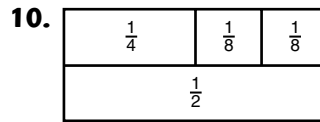
Home Link 8.3

1. $\frac{1}{2}$; $\frac{1}{1}$; $\frac{1}{4}$
2. 9 pieces of fruit are shown.
 $\frac{4}{9}$ of the fruit are bananas.
 $\frac{2}{9}$ of the fruit are pears.
 $\frac{3}{9}$ of the fruit are apples.
 $\frac{0}{9}$ of the fruit are oranges.

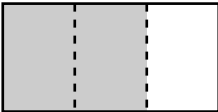
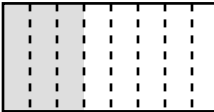

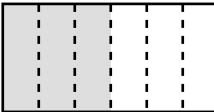
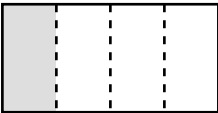
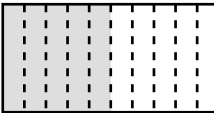
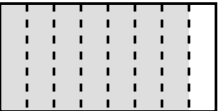
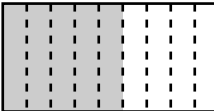


Home Link 8.4

4. $\frac{2}{4}$; $\frac{1}{2}$ 5. $\frac{3}{6}$; $\frac{1}{2}$ 6. $\frac{4}{8}$; $\frac{1}{2}$
8. 4 cats 9. $\frac{4}{16}$



Home Link 8.5

1.  2. 
3.  4. 
5.  6. 
7.  8. 

9. $\frac{2}{3}$, $\frac{7}{8}$, $\frac{5}{9}$ 10. $\frac{3}{6}$, $\frac{5}{10}$ 11. $>$ 12. $<$
13. $>$ 14. $=$ 15. $>$ 16. $<$
17. $<$ 18. $=$

Home Link 8.6

1. 6; $\frac{6}{4}$; $1\frac{2}{4}$ 2. 9; $\frac{9}{5}$; $1\frac{4}{5}$ 3. 7; $\frac{7}{3}$; $2\frac{1}{3}$
4. $\frac{1}{12}$ 5. $\frac{28}{12}$; $2\frac{4}{12}$

Home Link 8.7

1. 8 eggs 2. $\frac{1}{4}$ of the lawn
3. 2 miles 4. $1\frac{1}{4}$ trays
5. 6 quarters; \$2.28