

Dear Teachers,

The following pages have been designed with you in mind. Flip through this book to find exciting, hands-on ideas for teaching fraction concepts with a pocket chart! (LER 2206)

Pocket Chart Math – Beginning Fractions has been developed to provide creative teaching ideas and reproducible activities to support the use of a pocket chart. Suggested activities are designed to attract all types of learners. They encourage listening, speaking, observing and manipulating pictures to familiarize children with the concept of fractions as part of a whole. In addition, this book contains 192 ready-to-use cards to aid you in teaching beginning fractions. The cards display illustrations, numbers, and/or words to use within each lesson, and are color-coded for handy organization. A Cards-At-A-Glance chart shows what is pictured on each card, and is located in the back of the book for easy reference. Also included is a Reading List to help you build a classroom library filled with fraction concepts.

This book quickly becomes a compact storage file! Tear out the sheets of cards along the perforated lines. Laminate the cards for extra durability, cut them, and store them in the pocket provided on the back cover of the book. As you use them, tear out the blackline master pages for photocopying, then use the folder pocket on the inside front cover for storage.

Pocket Chart Math

Beginning Fractions

Introduction Strategies

1. Begin with a definition of the word **fraction**. Ask, "Does anyone know what the word **fraction** means?" Take all responses, and lead children to understand that **a fraction is a part of a whole**. Give examples to make the concept more concrete. Ask if the children have ever eaten pizza. "Did you eat the whole pizza? If not, how many pieces did you eat? If you only ate part of the pizza, you ate a **fraction** of the whole pizza." Try the same questions using a pie as an example. The number of pieces eaten was a **fraction**, or a part, of the whole pie. After this discussion,

review the term **fraction**, and see if the children can give you other examples of what it means.

2. Ask children, "Does anyone know what a fraction looks like?" Invite them to give examples of where they have seen fractions before. Perhaps they've seen them in store windows advertising a sale, on television, or maybe even in their math books!
3. Do an introductory fraction language activity with the students. Ask them to write their names on a sheet of paper. Then ask them to count the total number of letters in their first name, and write it down. Then ask, "How many of you have an "a" in your name? If you do, count the a's in your name and write that number down." (Try other letters for those that do not have an "a" in their name.) Ask, "Is your whole name made up of a's?" Lead students to understand that only a part of their name is spelled with the letter a, thus it is a **fraction** of their whole name. Ask them to repeat how many a's are in their name, and the total number of letters in their name. Explain, "for example, in the name Sarah, 2 out of 5 letters are a's, but in the name Sam, 1 out of 3 letters are a's." Allow students to share their results using the words "out of" to express a fraction.
4. Introduce fractions as parts of a set using the class as an example. Ask 4 girls and 2 boys to come up to the front of the room. Ask students to count the number of children in the group (6). Then ask, "How many girls are in the group?" When they provide the answer, ask, "Do girls make up the whole group, or just a part of it? Who can tell me what part of the group is girls?" (Remind them to use the words "out of" when explaining their answer: 4 out of 6 children are girls.) Continue this activity with other groups by using boys, hair color, color of clothing, freckles, eye color, etc. as variables.

Teaching Notes: Numerator and Denominator

Cards needed: (red ☀️)



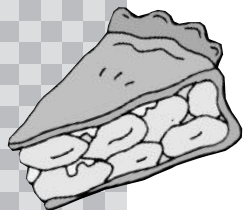
Fractions	numerator	denominator	part	whole		
=	=	=	=	1	4	$\frac{1}{4}$

Presenting the concept:

Place the title *Fractions* at the top of the pocket chart. Based on the introduction strategies, students should have an understanding that fractions are parts of a whole unit. Briefly return to Introduction Strategy 2. Remind students about where they have seen fractions before, and what they look like.



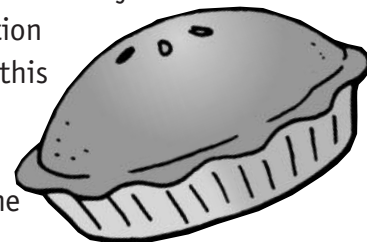
Hold up an example fraction card, $\frac{1}{4}$, and place it in the pocket chart under the word *Fractions*. Ask students if they recognize this number as a fraction. Explain that every fraction has a name, based on the numbers that are used to write its name. Every fraction has a number on top of a line, which is called a **numerator**. Ask students to repeat the term for you, and place the word *numerator* in the pocket chart. Explain that the numerator in a fraction indicates **how many parts of the whole unit we are talking about**. Place = *part* next to *numerator* in the pocket chart. Ask students to identify the *numerator* in your example (1). Place = 1 next to the word *part* in the pocket chart. You should have a five-card display reading *numerator = part = 1*.



Using the same fraction card as an example, tell children that the number under the line also has a special name. It is called a **denominator**. Ask students to repeat this term, and place the *denominator* card in the pocket chart. Explain that the denominator in a fraction tells **how many parts are in the whole unit**. Place = *whole* next to the term *denominator* in the pocket chart. Ask students to identify the denominator in your example (4). Place = 4 next to the word *denominator* in the pocket chart. You should have a five-card display reading *denominator = whole = 4*. Continue this introduction until students are familiar with the terms *numerator* and *denominator*.

Follow-up activity:

Place fraction numeral cards in the pocket chart. Ask students to identify numerators or denominators. For example, say, "Point to a fraction that has a 3 as its numerator, or a 5 as its denominator." Take this activity a step further by asking, "What does this fraction tell us?" (We are talking about only 3 parts of a whole unit with 5 total parts.) Continue the activity with other cards, then use the activity on page 3 for review.



Name _____

Activity 1

Numerators and Denominators

Directions: Draw a line matching each description to the fraction.

N stands for numerator, and D stands for denominator.

$$\frac{5}{7}$$

$$\frac{2}{9}$$

$$N = 3$$

$$D = 6$$

$$\frac{2}{6}$$

$$\frac{7}{8}$$

$$N = 5$$

$$D = 5$$

$$\frac{1}{5}$$

$$\frac{1}{3}$$

$$N = 7$$

$$D = 9$$

$$\frac{3}{4}$$

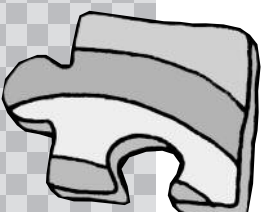
$$\frac{4}{7}$$

$$N = 4$$

$$D = 3$$


Teaching Notes: Fraction Identification

Cards needed: (orange (☀️), pink (☀️) picture cards)



Fraction	Identification	halves	thirds	fourths
fifths	sixths	sevenths	eighths	ninths
tenths	$\frac{1}{2}$	$\frac{2}{3}$	$\frac{3}{4}$	$\frac{4}{5}$
	$\frac{5}{6}$	$\frac{6}{7}$		
$\frac{7}{8}$	$\frac{8}{9}$	$\frac{9}{10}$	$\frac{10}{10}$	$\frac{2}{8}$


Presenting the concept:



Place the title *Fraction Identification* in the pocket chart. Now that children have an understanding of the words *numerator* and *denominator*, explain that they are going to learn how to say fractions' names. Use the fraction cards shown above, one at a time, as examples in the pocket chart. Present the terminology in the pocket chart as you explain, "When we say a fraction's name, we simply say the numerator like we name any whole number. However, the denominator is stated a special way. Instead of saying 'two' when you see a 2 in the denominator, we say *halves*. This means that there are 2 equal parts in the whole unit. (Place the picture of $\frac{1}{2}$ in the pocket chart.) When you see a 3 in the denominator, we say *thirds*, which means there are 3 equal parts in the whole unit." Continue this lesson with *fourths*, *fifths*, *sixths*, *sevenths*, *eighths*, *ninths*, and *tenths*. Place the word card and the corresponding fraction and picture cards next to it in the pocket chart for all to see. Invite students to repeat the new terminology.

Now that students are familiar with the new fraction terminology, ask them to go back and name the fractions in the pocket chart. Take all suggestions, and lead students to understand that we call the fraction "one-half, two-thirds, three-fourths," etc. Have students repeat the names for reinforcement.

Follow-up activity:



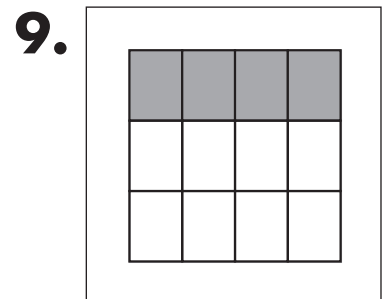
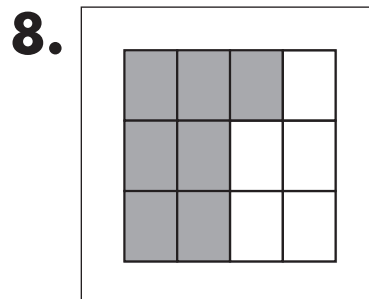
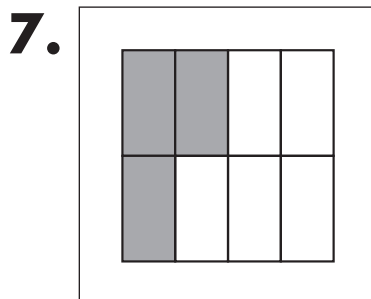
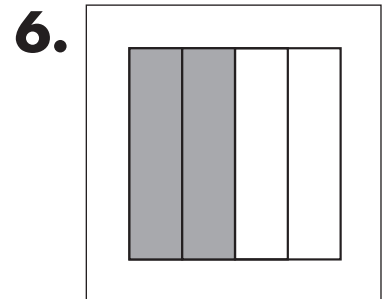
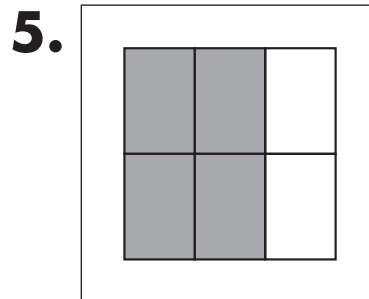
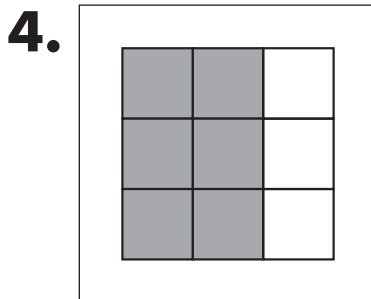
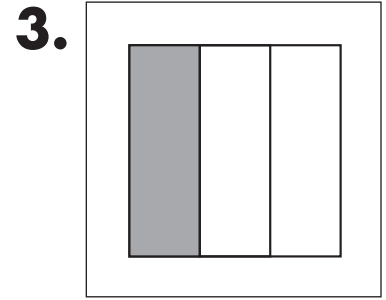
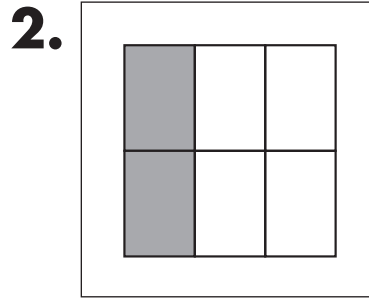
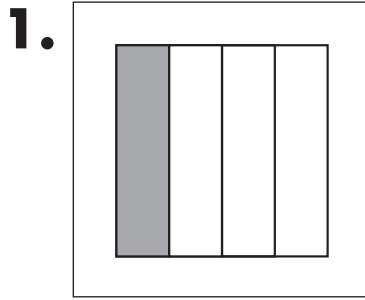
Now that students are familiar with naming fractions, invite them to identify fractions shown in pictures. Place the pictorial representation of $\frac{2}{8}$ in the pocket chart. Ask, "How many parts are shaded? (2) How many equal parts are in the whole unit? (8). Who can tell me what fraction is shaded?" (2 out of 8 parts are shaded, so this is a picture of $\frac{2}{8}$.) Invite a child to come up and place the fraction $\frac{2}{8}$ next to the picture in the pocket chart. Continue this activity with additional fractions and picture cards.

Activity 2

Fraction Identification

Directions: Look at the pictures.

Write the fraction for the part that is shaded on the lines below.



Teaching Notes: Identifying Fractions of a Set

Cards needed: (yellow ☀)

Fractions	of a Set	sevenths	fifths	(yellow)	(red)		
$\frac{2}{5}$	$\frac{1}{7}$	$\frac{2}{7}$	$\frac{3}{7}$	$\frac{4}{7}$	$\frac{5}{7}$	$\frac{6}{7}$	$\frac{7}{7}$
$\frac{3}{5}$							

Presenting the concept:

Building on students' previous knowledge of fractions as part of a whole, explain that fractions are also parts of a **set**, or a group of things. Go back to introductory activities 3 and 4, where children named what part of a group was made up of girls, boys, etc.

To present this activity on the pocket chart, place the title cards *Fractions of a Set* at the top of the pocket chart. Use the *sevenths* title and picture cards, or the *fifths* title card and the red and yellow dots to represent different fractional amounts. For instance, place 3 red dots and 2 yellow dots in one pocket. Underneath, place one red dot and one yellow dot, with space in between the two. Ask children, "What fraction of this set is red? ($\frac{3}{5}$)."

Invite a child to place the fraction card next to the single red dot. Then ask, "What fraction of this set is yellow? ($\frac{2}{5}$)" Invite a child to place the fraction card next to the single yellow dot.

	$\frac{3}{5}$	or	red	red	red	yellow	yellow
			red	$\frac{3}{5}$		yellow	$\frac{2}{5}$

Review the activity by summarizing, " $\frac{3}{5}$ of the set are red dots, and $\frac{2}{5}$ of the set are yellow dots." Continue this activity with other combinations of yellow and red dots, labeling the fractions with number cards.

Follow-up activity:

Present this lesson in a center for review. Place various combinations of red and yellow dots in the pocket chart. Place the fraction numeral cards in pile nearby. Invite students to come up to the pocket chart to identify the fractions as part of a set.

For an extension activity, place fraction numeral cards with 1 yellow or 1 red dot in the pocket chart, indicating what part of the set is yellow or red. Invite students to create the set indicated on the cards by placing yellow and red dots in the pocket chart.

Activity 3

Fractions of a Set

Directions: Look at the pictures below.

Answer each question by writing a fraction in the blank.

1. What fraction of the set is pigs? _____



2. What fraction of the set is ice cream cones? _____



3. What fraction of the set is snails? _____



4. What fraction of the set is kites? _____



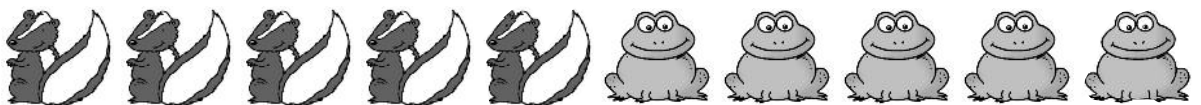
5. What fraction of the set is flowers? _____



6. What fraction of the set is NOT bears? _____



7. What fraction of the set is NOT skunks? _____





8. What fraction of the set is NOT stars? _____



Teaching Notes: Adding Fractions with Like Denominators

Cards needed: (green ☀)

Adding	1	2	3	4	5	6	(red) 
& Subtracting	7	8	9	+	-	=	(yellow) 
Fractions							

Presenting the concept:

Place the title *Adding & Subtracting Fractions* at the top of the pocket chart. Explain to students that like any other numbers, fractions can be added or subtracted. Review regular addition and subtraction with whole numbers as an introduction.

Place an addition sentence in the pocket chart ($3 + 4 =$). Then place dots in the pocket chart, representing each of the amounts in the math sentence. Ask students what the sum is (7), and how they found their answer. Lead them to the conclusion that when we add things together, we count on from one amount (3, 4, 5, 6, 7) or combine the two amounts and count the total (1, 2, 3, 4, 5, 6, 7). Place the sum (7) after the =. Do more whole number math sentences like this until your students are comfortable with the concept.

To introduce subtraction, place $5 - 3 =$ in the pocket chart. Ask students what the difference is, and how they found their answer (2). Lead them to understand that when we subtract, an amount is taken away, or counted backwards (5, 4, 3, 2).

Then, place a fraction addition or subtraction sentence in the pocket chart. Use fractions with the same denominator, for instance, $\frac{3}{5} + \frac{1}{5} =$. Ask students to guess the answer, then lead them to understand that when denominators are the same, we add or subtract the numerators, just like we do with whole numbers. The denominator remains the same in the answer, and the numerator reflects the sum or difference of the numerators ($\frac{4}{5}$). Repeat this activity with many other examples of fractions with the same denominators. As an introductory lesson, be sure your addition sentences do not exceed one whole.

Follow-up activity:

For an addition activity, include a statement like $\frac{3}{5} + \frac{2}{5} =$ in the pocket chart. This will prompt you to discuss $\frac{5}{5}$ as one whole. After children have concluded the answer is $\frac{5}{5}$, ask them to tell you what $\frac{5}{5}$ means (5 out of 5 pieces, or one whole unit.) You can place the number 1 next to $\frac{5}{5}$ in the pocket chart. Use other examples to find results like $\frac{3}{4}$ and $\frac{4}{4}$, reinforcing the concept that whenever the numerator and denominator are the same, the answer is one whole.

Activity 4

Adding and Subtracting Fractions

Directions: Look at the following sentences. Add or subtract the fractions, and write the sum or difference on the line that follows.

$$\frac{1}{10} + \frac{1}{10} = \underline{\hspace{2cm}} \qquad \frac{6}{10} - \frac{5}{10} = \underline{\hspace{2cm}}$$

$$\frac{3}{4} + \frac{1}{4} = \underline{\hspace{2cm}} \qquad \frac{8}{9} - \frac{3}{9} = \underline{\hspace{2cm}}$$

$$\frac{6}{9} + \frac{2}{9} = \underline{\hspace{2cm}} \qquad \frac{7}{8} - \frac{3}{8} = \underline{\hspace{2cm}}$$

$$\frac{2}{5} + \frac{1}{5} = \underline{\hspace{2cm}} \qquad \frac{4}{7} - \frac{1}{7} = \underline{\hspace{2cm}}$$

$$\frac{6}{8} + \frac{1}{8} = \underline{\hspace{2cm}} \qquad \frac{3}{6} - \frac{2}{6} = \underline{\hspace{2cm}}$$

$$\frac{4}{8} + \frac{2}{8} = \underline{\hspace{2cm}} \qquad \frac{4}{5} - \frac{1}{5} = \underline{\hspace{2cm}}$$

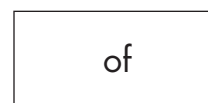
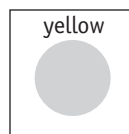
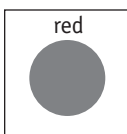
$$\frac{1}{7} + \frac{4}{7} = \underline{\hspace{2cm}} \qquad \frac{4}{4} - \frac{2}{4} = \underline{\hspace{2cm}}$$

$$\frac{5}{9} + \frac{2}{9} = \underline{\hspace{2cm}} \qquad \frac{2}{3} - \frac{1}{3} = \underline{\hspace{2cm}}$$

Teaching Notes: Finding Part of a Group

Cards needed: green (☀️) fraction and whole number cards

yellow (☀️)



Presenting the concept:

Start the lesson by reviewing parts of a set. Place 4 red dots and 6 yellow dots in the pocket chart. Ask the children, "How many dots are in this set? (10)" Then ask them to place fraction cards under the set, indicating the part of the set is red. ($\frac{4}{10}$), and the part that is yellow ($\frac{6}{10}$). Continue with other examples, like $\frac{4}{6}$ red with $\frac{2}{6}$ yellow, and $\frac{2}{8}$ red with $\frac{6}{8}$ yellow.

Build on the lesson by placing 6 red dots in a pocket on the pocket chart. Ask students, "How many dots are in this set? (6) How would we show that $\frac{1}{2}$ of 6 is yellow?" Invite a volunteer to come up and show the answer in yellow by replacing 3 of the 6 red dots with yellow dots. Ask children to explain their reasoning. (How did they know to replace 3 of the 6?) Answers should include that $\frac{1}{2}$ indicates 2 equal parts in the whole unit 6; 6 divided into two equal parts = 3 in each part; so $\frac{1}{2}$ of 6 = 3.

Try another example. (You will need to make additional yellow dots.) Place 10 yellow dots in a pocket of the pocket chart. "How many dots are in this set? (10) Can someone show that $\frac{2}{5}$ of 10 is red?" Invite a volunteer to come up and show the answer in red (by replacing 4 of the 10 yellow dots with red dots). Ask how they knew to replace 4 of the 10 yellow dots. Answers should include that $\frac{2}{5}$ indicates 5 equal parts in the whole unit, 10. Ten divided into five equal parts = 2 in each part, so $\frac{2}{5}$ of 10 = 4.

Follow-up activity:

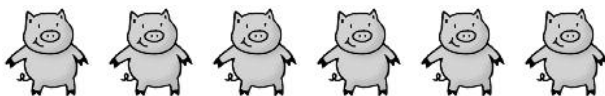
(You may need to make additional yellow dots for this activity.) Place a set of 8 dots (2 red, 6 yellow) in the pocket chart. Ask students, "How many dots are in the set? (8) How many are colored red? (2) What fraction of the whole group of dots is red? ($\frac{2}{8}$ or $\frac{1}{4}$)" Try to have a student ask the question for this problem: "What is $\frac{1}{4}$ of 8? (2)" Then use other cards to provoke the questions, "What is $\frac{1}{3}$ of 9? (3)" and "What is $\frac{1}{2}$ of 4? (2)" Place more fraction questions without pictures in the pocket chart. For instance, $\frac{1}{3}$ of 6 = 2, $\frac{1}{2}$ of 4 = 2, or $\frac{1}{5}$ of 10 = 2. Have whole number and fraction picture cards available to children, and invite them to come up and place the correct answers with illustrations in the pocket chart.

Activity 5


Finding Part of a Group

Directions: Look at the sets below. Circle the fraction in the set, then write the whole number answer on the line.

What is...

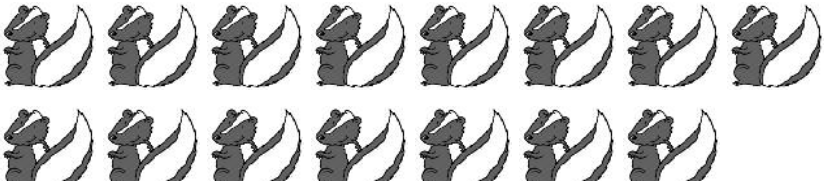
$\frac{1}{2}$ of 6 =  _____


$\frac{1}{8}$ of 16 =  _____

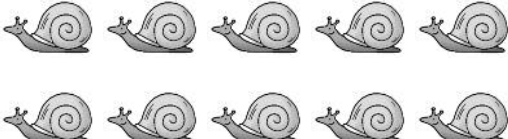
$\frac{1}{4}$ of 8 =  _____

$\frac{1}{4}$ of 12 =  _____

$\frac{1}{3}$ of 9 =  _____

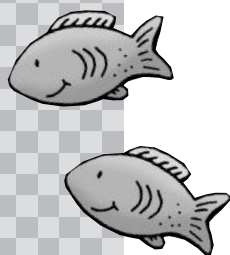
$\frac{1}{5}$ of 15 =  _____

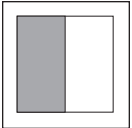
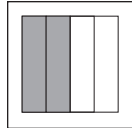
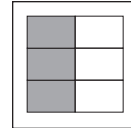
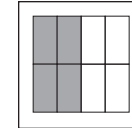
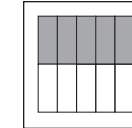
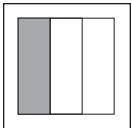
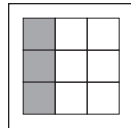
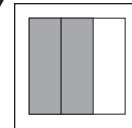
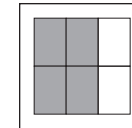
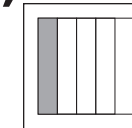
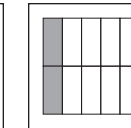
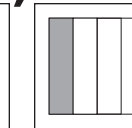
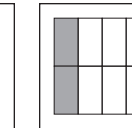
$\frac{1}{3}$ of 6 =  _____

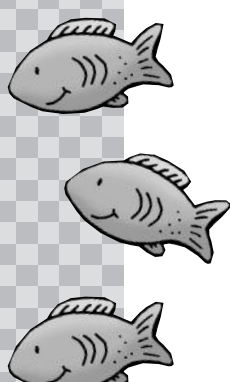
$\frac{1}{5}$ of 10 =  _____

Teaching Notes: Equivalent Fractions

Cards needed: blue (☀)

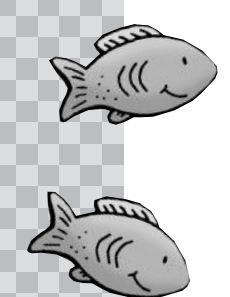


Equivalent	=	$\frac{1}{2}$	$\frac{2}{4}$	$\frac{3}{6}$	$\frac{4}{8}$	$\frac{5}{10}$	
Fractions							
$\frac{1}{3}$	$\frac{3}{9}$	$\frac{2}{3}$	$\frac{4}{6}$	$\frac{1}{5}$	$\frac{2}{10}$	$\frac{1}{4}$	$\frac{2}{8}$
							



Presenting the concept:

Place the title *Equivalent Fractions* at the top of the pocket chart. In the order shown above, hold up a set of picture cards as flash cards for students to identify. Then place them in rows (skipping a row in between) in the pocket chart as they are named. As they are in rows, ask for volunteers to come up and place the numerical representation of each fraction below each picture in the pocket chart. Ask students, "Are any of these fractions exactly the same? Do any of them have the same name? What do you notice about this group of fractions?" (All cover the same part of the unit, but they each have a different name.) Lead students to understand that these fractions are called **equivalent fractions**, which means they cover the same part of a whole unit. Place equal signs between the numerical values in the pocket chart to show that these fractions are equivalent. Repeat this activity with the other sets as well.



Follow-up activity:

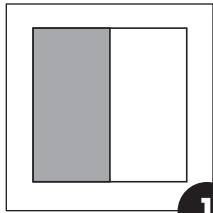
Do a center activity with equivalent fractions. Place pictures of fractions $\frac{1}{2}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{5}$ and $\frac{1}{4}$ in a column down the left side of the pocket chart. On the right side, place a column of mixed-up equivalent fraction pictures ($\frac{2}{4}$, $\frac{3}{9}$, $\frac{2}{8}$, $\frac{2}{10}$, $\frac{4}{6}$). Invite children to rearrange the cards to show equivalent pairs.

When students are finished, ask them to mix up one of the columns for the next person to try. Exchange the pictures for numerical representations of fractions to increase the difficulty of the activity.

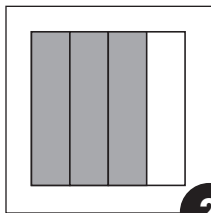
Activity 6

Equivalent Fractions

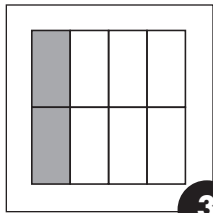
Directions: Draw a line matching equivalent fractions.



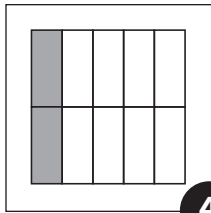
1



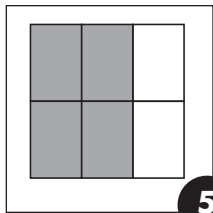
2



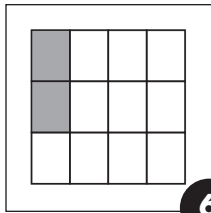
3



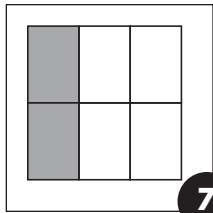
4



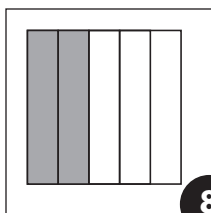
5



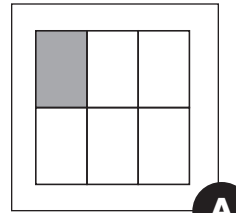
6



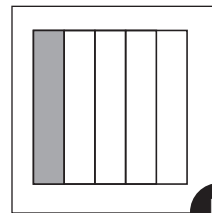
7



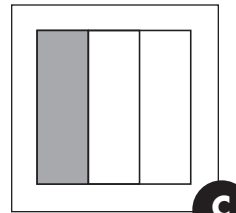
8



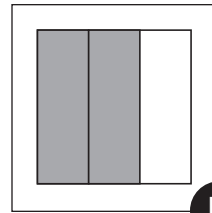
A



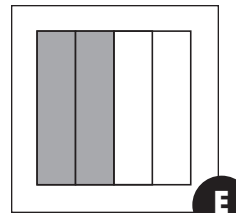
B



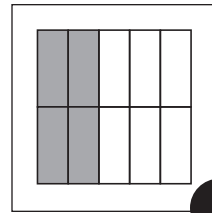
C



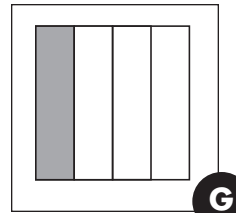
D



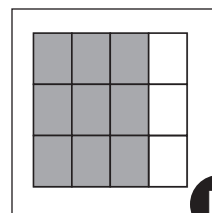
E



F



G



H

Teaching Notes: Comparing Fractions

Cards needed: green (☀️) fraction and whole number cards

pink (☀️) fraction picture cards

purple (☀️)

Comparing

Fractions

<

>

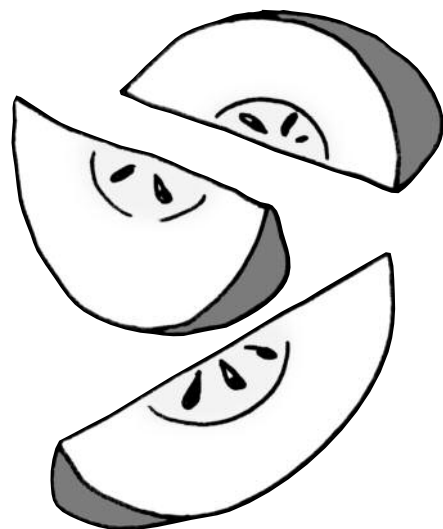
Presenting the concept:

Place the title cards *Comparing Fractions* at the top of the pocket chart. Review what children learned about equivalent fractions, or fractions that represent the same part of a whole unit. Remind students, “Not all fractions are equivalent. Some cover more of a whole unit than others.” Place two fraction pictures ($\frac{3}{4}$ and $\frac{1}{4}$) in the pocket chart. Ask students to observe which of the two is the larger fraction, asking for reasons which led them to the answer (one takes up more space in the whole unit). Then invite a student to place the correct symbol (greater than $>$, or less than $<$) in the pocket chart, between the two numbers, to form a correct math statement. In this case, $\frac{3}{4} > \frac{1}{4}$. Use other same-denominator examples to compare. Eventually, take away the picture cards, and ask students to compare the numerical fraction cards only.

NOTE: After much practice, ask students what they notice about comparing fractions when the denominator is the same. Point out that when the denominator is the same, they only have to compare the numerators!

Follow-up activity:

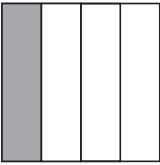
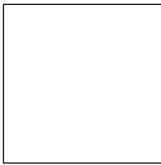
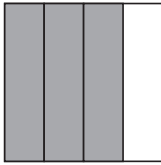
Try a fun center activity! At the top of the pocket chart, place the words *Comparing Fractions* with the $>$ card. Place pairs of same-denominator fractions in two columns in the pocket chart. Invite children to come up and rearrange the pairs to show that all of the pairs are true statements. (The fractions on the left are greater than the fractions on the right.) Try the activity again with different fractions and the $<$ card at the top!

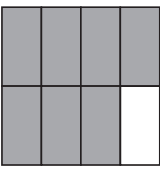

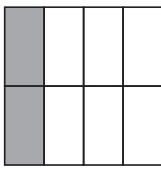


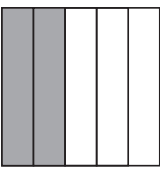
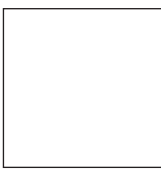
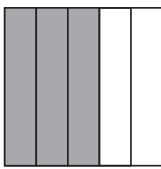
Activity 7

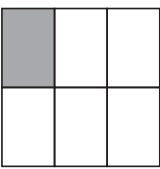
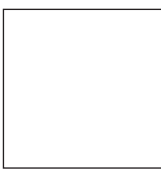
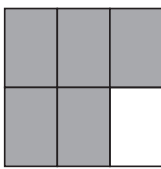
Comparing Fractions

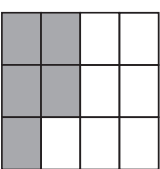

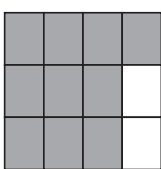
Directions: Look at the pictures below. Identify each fraction on the line next to the picture, and fill in each box with a < or > sign to make a true statement.

1.  _____  _____ 

2.  _____  _____ 

3.  _____  _____ 

4.  _____  _____ 

5.  _____  _____ 

Reading List

The Easy Book of Fractions

David C. Whitney

F. Watts, NY: 1970

Eating Fractions

Bruce McMillan

Scholastic, NY: 1991

Fraction Action

Loreen Leedy

Holiday House, NY: 1994

Fraction Fun

David Adler

Holiday House, NY: 1996

Fractions

David Steinecker

Benchmark Books, NY: 1996

Give Me Half!

Stuart J. Murphy

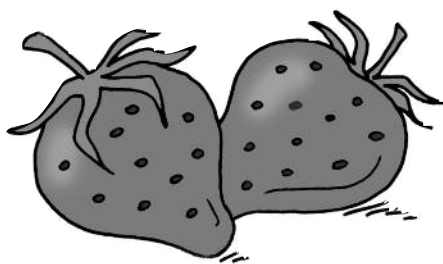
HarperCollins Publishers, NY: 1996

The Hershey's Milk Chocolate Bar

Fractions Book

Jerry Pallotta

Cartwheel Books, NY: 1999



Card-At-A-Glance

Cards are shown as front-to-back pairs.

$\frac{1}{2}$		1	$\frac{2}{5}$		$\frac{5}{8}$		red dot		$\frac{2}{2}$	
$\frac{1}{3}$		2	$\frac{3}{6}$		$\frac{5}{9}$		red dot		$\frac{3}{3}$	
$\frac{1}{4}$		3	$\frac{3}{9}$		$\frac{5}{10}$		=	$\frac{4}{4}$		
$\frac{1}{7}$		4	$\frac{4}{7}$		$\frac{5}{12}$		red dot		$\frac{5}{5}$	
$\frac{1}{6}$		5	$\frac{4}{6}$		$\frac{6}{7}$		red dot		$\frac{6}{6}$	
$\frac{1}{5}$		6	$\frac{4}{5}$		$\frac{6}{8}$		>	$\frac{7}{7}$		
$\frac{1}{10}$		7	$\frac{4}{10}$		$\frac{6}{9}$		>	$\frac{8}{8}$		
$\frac{1}{9}$		8	$\frac{4}{9}$		$\frac{6}{10}$		>	$\frac{9}{9}$		
$\frac{1}{8}$		9	$\frac{4}{8}$		$\frac{6}{12}$		<	$\frac{10}{10}$		
$\frac{2}{4}$		10	$\frac{5}{7}$		$\frac{7}{8}$		<	$\frac{12}{12}$		
$\frac{2}{3}$		11	$\frac{5}{6}$		$\frac{7}{9}$		<	+		
$\frac{1}{12}$		12	$\frac{4}{12}$		$\frac{7}{10}$		yellow dot		+	
$\frac{2}{7}$		$\frac{1}{2}$	$\frac{5}{10}$		$\frac{7}{12}$		yellow dot		-	
$\frac{2}{6}$		$\frac{1}{3}$	$\frac{5}{9}$		$\frac{8}{9}$		yellow dot		-	
$\frac{2}{5}$		$\frac{1}{4}$	$\frac{5}{8}$		$\frac{8}{10}$		yellow dot		=	
$\frac{2}{10}$		$\frac{1}{5}$	$\frac{6}{8}$		$\frac{8}{12}$		red dot		=	
$\frac{2}{9}$		$\frac{1}{6}$	$\frac{6}{7}$		$\frac{9}{10}$		yellow dot		=	
$\frac{2}{8}$		$\frac{1}{7}$	$\frac{5}{12}$		$\frac{9}{12}$		$\frac{10}{10}$			
$\frac{3}{5}$		$\frac{1}{8}$	$\frac{6}{12}$		$\frac{4}{8}$		red dot		$\frac{10}{12}$	
$\frac{3}{4}$		$\frac{1}{9}$	$\frac{6}{10}$		$\frac{4}{9}$		halves	of a Set	fifths	Comparing
$\frac{2}{12}$		$\frac{1}{10}$	$\frac{6}{9}$		$\frac{4}{10}$		sevenths	Fractions	tenths	Fraction
$\frac{3}{8}$		$\frac{1}{12}$	$\frac{7}{10}$		$\frac{4}{12}$		thirds	denominator	sixths	whole
$\frac{3}{7}$		$\frac{2}{3}$	$\frac{7}{9}$		$\frac{5}{6}$		eighths	numerator	twelfths	part
$\frac{3}{6}$		$\frac{2}{4}$	$\frac{7}{8}$		$\frac{5}{7}$		fourths	& Subtracting	+	Identification
							ninths	Adding	of	Equivalent