

Fractions

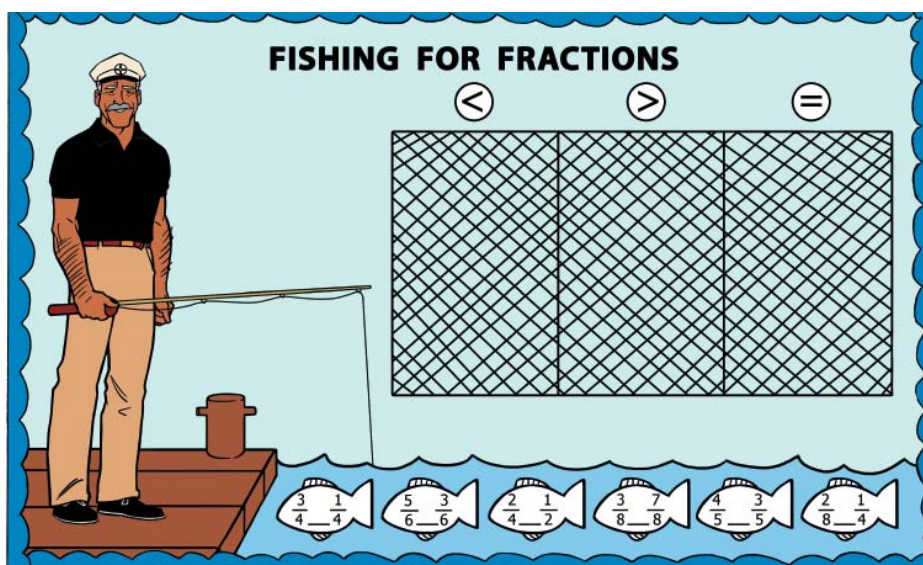
Lesson	Topic	Lesson Objectives	Chapter Materials
27	Part of a Whole	<ul style="list-style-type: none"> Demonstrate an understanding of fractions Recognize that $\frac{2}{2}$, $\frac{3}{3}$, $\frac{4}{4}$, $\frac{5}{5}$, $\frac{6}{6}$, $\frac{8}{8}$, and $\frac{10}{10}$ equal 1 whole Demonstrate an understanding of <i>numerator</i> and <i>denominator</i> Identify the fraction that names part of a whole 	<p>Teacher's Visual Packet:</p> <ul style="list-style-type: none"> Chart 6: <i>Halves, Thirds, Fourths</i> Chart 7: <i>Sixths, Eighths</i> Chart 8: <i>Tenths</i> Chart 9: <i>Fraction Bars</i> Chart 10: <i>Part of a Set</i> Chart 26: <i>Circle Graph: Sports</i> Fraction Kit Money Kit <p>Student Manipulatives Packet:</p> <ul style="list-style-type: none"> Fraction Kit Shapes Kit Number Cards: 0–9 <p>Instructional Aids (Teacher's Toolkit CD):</p> <ul style="list-style-type: none"> Cumulative Review Answer Sheet (page IA9) for each student Equal Parts (page IA19) for each student Fraction of a Set transparency (page IA20) Fraction of a Set (page IA20) for each student Spinner transparency (page IA21) Fraction Number Lines transparency (page IA22) Fraction Number Lines (page IA22) for each student Compare Unlike Fractions transparency (page IA23) Compare Unlike Fractions (page IA23) for each student Fraction Word Problems transparency (page IA24) Mixed Numbers transparency (page IA25) Add & Subtract Mixed Numbers transparency (page IA26) Add & Subtract Mixed Numbers (page IA26) for each student Fractional Parts transparency (page IA27) <p>Other Teaching Aids:</p> <ul style="list-style-type: none"> 3 pens 5 pencils 2 small buttons 1 large button 4 pennies 2 nickels 3 paper plates Overhead markers: red and blue Multiplication flashcards Division flashcards <p>Math 4 Tests and Answer Key</p> <p>Optional (Teacher's Toolkit CD):</p> <ul style="list-style-type: none"> ReTeaching pages 12–16 Enrichment pages 22–35 Extended Activities
28	Part of a Set	<ul style="list-style-type: none"> Identify the fraction that names part of a set Identify the numerator and the denominator of a fraction Write the fraction that names part of a set Predict the results of a probability activity Record data for a probability activity 	
29	Fraction of a Set	<ul style="list-style-type: none"> Determine the fraction of a set Determine probability 	
30	Compare & Order Fractions	<ul style="list-style-type: none"> Compare like fractions Order like fractions from least to greatest Compare unlike fractions 	
31	Add & Subtract Fractions	<ul style="list-style-type: none"> Add and subtract like fractions Develop an understanding of improper fractions Solve fraction word problems 	
32	Mixed Numbers	<ul style="list-style-type: none"> Recognize that $\frac{3}{3}$, $\frac{4}{4}$, and $\frac{6}{6}$ equal 1 whole Develop an understanding of mixed numbers Demonstrate an understanding of an improper fraction and its equivalent mixed number Compare mixed numbers 	
33	Add & Subtract Mixed Numbers	<ul style="list-style-type: none"> Add and subtract mixed numbers Write mixed numbers 	
34	Fractional Parts	<ul style="list-style-type: none"> Determine the fractional parts of a whole Interpret a circle graph 	
35	Chapter 3 Review	Review	
36	Chapter 3 Test Cumulative Review	<ul style="list-style-type: none"> Identify the digit in a given place in a number Round a number to the place with the greatest value Complete a missing addend equation with a variable Identify the number that is 10,000 more Subtract 2-, 3-, and 4-digit numbers 	

As you prepare the lessons, refer to the corresponding Instructional Aids pages located on the Teacher's Toolkit CD.

A Little Extra Help

The following activity provides “a little extra help” for the student experiencing difficulty with the concepts taught in Chapter 3.

Determine the fraction of a set—Finding $\frac{1}{4}$ of 4 may not pose a problem to the student. However, finding $\frac{1}{4}$ of 12 may be confusing. To help the student, allow him to fold strips of paper. For example, to find $\frac{1}{4}$ of 12, give the student a strip of paper that has been marked into 12 equal units. Direct him to fold the strip into 4 equal parts. The student will see that there are 3 units in each fold; therefore, the answer is $\frac{1}{4}$ of 12 = 3.



Bulletin Board Preparation and Use

1. Enlarge and prepare the dock and the fishing pole. Place Captain Bailey on the dock. Place the fishing pole in his hand.
2. Use blue plastic wrap or blue paper for the water.
3. Place a fishing net (divided into 3 sections) above the water. Place a label above each section of the net: $<$, $>$, $=$.
4. Enlarge and prepare an assortment of fish. Laminate them and write a number sentence on each fish: $\frac{3}{4} - \frac{1}{4}$, $\frac{5}{6} - \frac{3}{6}$, $\frac{2}{4} - \frac{1}{2}$, $\frac{3}{8} - \frac{7}{8}$, $\frac{4}{5} - \frac{3}{5}$, $\frac{2}{8} - \frac{1}{4}$. You may want to write the answers on the backs of the fish to make them self-checking.
5. Place the fish in the water below the fishing net.

The student will select a fish and place it in the correct section of the fishing net. Change the number sentences to vary the activity.

You may also use the bulletin board for a class activity. Arrange the class into teams and follow the procedure, alternating teams. If a student places the fish in the correct section of the fishing net, he scores a point for his team. The team scoring the most points wins.

(**Note:** Allow students to use a Fraction Kit when comparing unlike fractions.)

Shark Alert!

LOG ENTRY—A bad day for us; a good day for the sharks.

“Shark!” The lookout’s call made my blood run cold. I rushed to the railing and spotted a large fin that cut through the waves. I’d seen sharks a couple times, but never one that close. The deck hands were already hauling up the divers as fast as they could. I saw another fin, then another, and another. The sharks were closing in.

Collins, the last diver, scrambled aboard just in time. The sharks seemed to slow down as they circled the ship. I could hear them bumping into it, brushing the hull with their rough hides. The heavy rasping noises sounded like teeth chewing on metal, but I knew that sharks didn’t usually attack ships.

Clipper swooped onto my shoulder and Lopez said, “That seagull will warn you of sharks, *señor*. Even before the lookout yelled, Clipper was flapping his wings and prancing around. That’s how we got the divers up in time.”

While we waited, the crew members told one shark story after another—some funny, some hair-raising. Collins had the best tale of all. “I was down exploring a wreck, and I just happened to look up. One of those big boys was just an arm’s length away, coming in fast. I reached out and grabbed him by the nose. But he kept coming—pushed me through the water with his head. So I jabbed him in the eye with my other hand, as hard as I could—and he moved away. By the time he had circled back around to me, I was safe on deck.”

After the sharks went cruising off, we found that they had snapped a line used for cradling the sunken ship, so Lopez called off the afternoon’s dive. That’s the way it’s been: some days the divers find a lot; some days nothing. And so far, no silver medallion.

Lopez promised to take me deep-sea diving one of these days. I hope the sharks are far away by then!



To the Parent

In Chapter 3, your child will study the following concepts about fractions:

Part of a whole

Part of a set

Fraction of a set

Compare & order fractions and mixed numbers

Add & subtract fractions and mixed numbers

Improper fractions

Captain Bailey and Clipper

When the lookout shouted, “Shark!” the deck hands got busy pulling up the divers. As the sharks circled the ship, the crew members told one shark story after another. Since the sharks had snapped a line cradling the sunken ship, Señor López had to call off the afternoon’s dive—no silver medallion today!

Math in the Home

Understanding that fractions are parts of a set can be difficult for some children. Use everyday situations to help your child get more practice. For example, you can point out that four of the sixteen socks in the laundry basket are red. Ask your child what fraction would represent the number of red socks. Next, ask what fraction would represent the number of white socks, then black. The adding and subtracting of fractions can also be reinforced by asking your child to add the fractions of red and black socks, and so forth.

Multiplication with 6, 7, 8, 9, or 10 as a factor

Division with 6, 7, 8, 9, or 10 as a divisor

The list above shows the multiplication and division facts your child will be reviewing during this chapter. Provide opportunities for your child to practice these facts by using flashcards, by calling out the related facts orally, or by playing games.

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