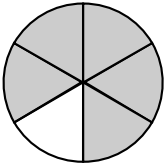


Student Guide

Circle Pieces: Red, Pink, Orange, Aqua
(SG pp. 253–257)





Questions 1–22

1. A. 2
B. 3
C. 6
2. 3
3. 2
4. aqua, orange, pink, red
5. A. 3 aquas
B. 2 oranges
C. 1 pink
6. 1 orange, 1 aqua
7. 1 orange, 1 pink, and 1 aqua
8. A.* 2 oranges, 2 aquas; 1 orange 4 aquas, or 1 pink, 3 aquas
B.* See Question A.
9. aqua
10. 2 aqua, 1 orange
11. A. pink
B. orange
C. aqua
D. 
E. greater than one-half

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
Circle Pieces: Red, Pink, Orange, Aqua


Find all the pieces with these colors in your fraction-circle set to use in this lesson.

Red	Pink	Orange	Aqua
			

Explore

1. Cover the red circle with all one color.
 - A. How many pink pieces does it take?
 - B. How many oranges?
 - C. How many aquas?
2. How many aquas cover one pink?



3. How many aquas cover one orange?

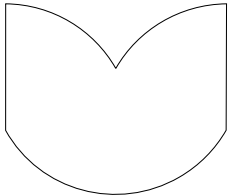

4. Put the pieces in order from smallest to largest. Write the colors.
5. Which is larger?
 - A. one orange or three aquas
 - B. one pink or two oranges
 - C. one pink or two aquas
6. Cover a pink piece with two colors. How many of each color does it take?
7. Cover the red circle with three colors. How many of each does it take?

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Circle Pieces: Red, Pink, Orange, Aqua SG • Grade 3 • Unit 9 • Lesson 3 **253**

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8. A. Cover the red circle with two colors. How many of each color does it take?
B. Solve the problem a second way. How many of each color does it take?
9. Make the shape below using pieces that are the same color. What color did you use?


10. Make the shape in Question 9 using the least number of pieces possible. What colors did you use? How many of each color?

Parts and Wholes
Be prepared to show how you answered the questions below using pieces.

11. The red circle is the unit whole.
 - A. What piece is one-half?
 - B. What piece is one-third?
 - C. What piece is one-sixth?
 - D. We can write $\frac{5}{6}$ for five aquas. Show this fraction with pieces.
 - E. Are two orange pieces greater than, less than, or equal to one-half?

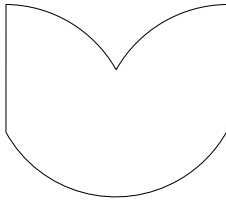
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*Answers and/or discussion are included in the lesson.

12. The red circle is the unit whole.
- A. Write a fraction for three aqua pieces.
 - B. Are three aqua pieces greater than, less than, or equal to one-half?
 - C. Write a fraction for two aqua pieces.
 - D. Are two aqua pieces greater than, less than, or equal to one-third?
13. The pink piece is the unit whole.
- A. What piece shows one-third?
 - B. Write a fraction for two aqua pieces.
 - C. Is one orange piece greater than, less than, or equal to two aquas?
 - D. Write a fraction for one orange piece.
 - E. Is an orange piece greater than, less than, or equal to one-half?
14. If the orange piece is the unit whole, write a fraction for one aqua as a number and in words.
15. The shape below is the unit whole.



- A. Write a fraction for one aqua.
- B. Write a fraction for two aquas. Show this fraction with pieces.
- C. What other piece makes the same fraction as two aquas?
- D. Write a fraction for three aquas. Show this fraction with pieces.
- E. Are three aquas greater than, less than, or equal to one-half?

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Circle Pieces: Red, Pink, Orange, Aqua

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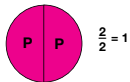
Name the Unit Whole

16. What is the unit whole:
- A. if one pink piece is one-half?
 - B. if one aqua piece is one-half?
17. What is the unit whole:
- A. if one orange piece is one-third?
 - B. if one aqua piece is one-third?
18. What is the unit whole:
- A. if two oranges are two-thirds?
 - B. if one orange piece is two-thirds?
19. What is the unit whole:
- A. if three aquas are one-half?
 - B. if two aquas are two-thirds?

Fractions Equal To or Greater Than One

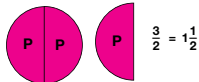
If the red circle is the unit whole, two pink pieces cover the whole circle. We can write $\frac{2}{2}$ (two-halves) to show that the whole is divided into two equal parts and that both parts are covered.

two halves or one whole



Three pink pieces are shown below. We can write $\frac{3}{2}$ or $1\frac{1}{2}$ to show that the circle is divided into halves and that three halves are shown.

three-halves or one and one-half



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Circle Pieces: Red, Pink, Orange, Aqua

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*Answers and/or discussion are included in the lesson.

12. A.* Possible solutions: $\frac{1}{2}$ or $\frac{3}{6}$

B.* equal to

C.* $\frac{2}{6}$ or $\frac{1}{3}$

D.* equal to

13. A. aqua

B. $\frac{2}{3}$

C. equal to

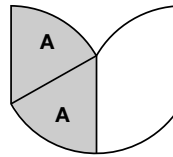
D. $\frac{2}{3}$

E. greater than

14. $\frac{1}{2}$; one-half, or one of two

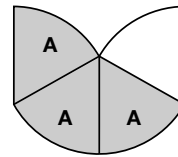
15. A. $\frac{1}{4}$

B. $\frac{2}{4}$ or $\frac{1}{2}$;



C. 1 orange

D. $\frac{3}{4}$;



E. greater than

16. A. red

B. orange

17. A. red

B. pink

18. A. red





B. pink

19. A. red

B. pink

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20. A. $\frac{3}{3}$
 B. $\frac{5}{3}$ or $1\frac{2}{3}$
 C. $\frac{6}{6}$
 D. $\frac{7}{6}$ or $1\frac{1}{6}$
 E. $\frac{10}{6}$ or $1\frac{4}{6}$
21. A. * $\frac{3}{3}$ or 1
 B. $1\frac{1}{3}$ or $\frac{4}{3}$
22. $\frac{3}{2}$ or $1\frac{1}{2}$

Red	Pink	Orange	Aqua
			

20. The red piece is the unit whole.
 A. Write a number for 3 oranges.
 B. Write a number for 5 oranges.
 C. Write a number for 6 aquas.
 D. Write a number for 7 aquas.
 E. Write a number for 10 aquas.

21. The pink piece is the unit whole.
 A. Write a number for 3 aquas.
 B. Write a number for 4 aquas.

22. If the orange piece is the unit whole, write a number for 3 aquas.

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Use the *Fraction Challenge* pages in the *Student Activity Book* to explore modeling fractions with rectangles.

Circle Pieces: Red, Pink, Orange, Aqua
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Name _____ Date _____

Naming Wholes and Parts

Homework

1. Carla, Emily, and Roberto want to share this leftover pizza. Show how to divide the leftover pizza fairly.

2. If this is one unit whole, then shade one-third.

3. Mark's family is putting in a patio in the backyard. It will have this shape. Show how the contractor can divide the area into sixths to pour concrete.

4. If this is one-half of a granola bar, draw one whole bar.

5. If this is one-fourth a of chocolate bar, draw $\frac{3}{4}$ of the bar.

6. If this is $\frac{1}{2}$ of a pan of brownies, draw the whole pan.

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Circle Pieces: Red, Pink, Orange, Aqua SAB • Grade 3 • Unit 9 • Lesson 3 339

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Student Activity Book

Naming Wholes and Parts (SAB p. 339) Questions 1–6

- 1.

2. $\frac{1}{3}$

- 3.

4. or

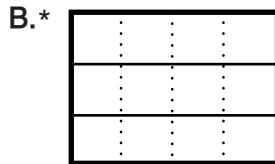
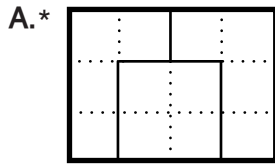
5.
or
 or

- 6.

Fraction Challenge (SAB pp. 341–342)

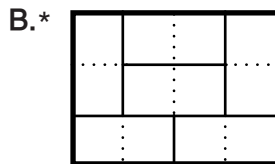
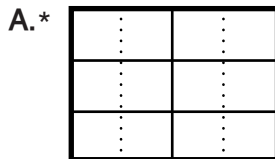
Questions 1–4

1. See Figure 9 in the lesson. Sample responses:



Possible response: Each fractional part has an equal number of small squares which means it has been divided into three equal parts or thirds.

2. See Figure 10 in the lesson. Sample responses:



Each small rectangle has 2 small squares which means it has 6 equal parts and is divided into sixths.

3. A. $\frac{1}{6}$; There are twelve small squares in all. The rectangle could be divided into six equal parts of two small squares each.
 B. $\frac{1}{3}$; The unit whole could be divided into three equal parts of 4 square units.
 C. $\frac{1}{2}$, $\frac{3}{6}$ or $\frac{6}{12}$; Half of twelve small squares is 6 squares.
4. A. $1\frac{1}{3}$ or $\frac{4}{3}$
 B. $\frac{7}{6}$ or $1\frac{1}{6}$

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Name _____ Date _____

Fraction Challenge

1. Divide each rectangle into thirds. Show two ways. Tell how you know the rectangles are divided into thirds.

A.

B.

2. Divide each rectangle into sixths. Show two ways. Tell how you know the rectangles are divided into sixths.

A.

B.

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Circle Pieces: Red, Pink, Orange, Aqua SAB • Grade 3 • Unit 9 • Lesson 3 341

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Name _____ Date _____

3. Use the rectangle below for Questions 3A, 3B, and 3C. Show or tell how you know.

A. Name a fraction for the part shaded with stripes.

B. Name a fraction for the part that is shaded gray.

C. Name two fractions for the part that is shaded white.

4. If the rectangle shown is one whole, what number does each shaded shape represent?

Unit Whole

A.

B.

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*Answers and/or discussion are included in the lesson.

Name _____ Date _____

More Fraction Rectangles

1. Shade $\frac{2}{3}$ of the rectangle. 2. Shade $\frac{5}{6}$ of the rectangle.

3. Write two fractions for the shaded part of the rectangle.

A.

B.

4. If this is the unit whole, write a number for the shaded part below.

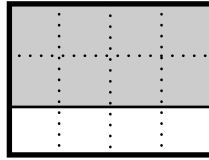
Unit Whole

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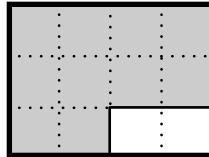
Circle Pieces: Red, Pink, Orange, Aqua SAB • Grade 3 • Unit 9 • Lesson 3 343

**More Fraction Rectangles (SAB pp. 343–344)
Questions 1–7**

1. One solution is shown.



2. One solution is shown.

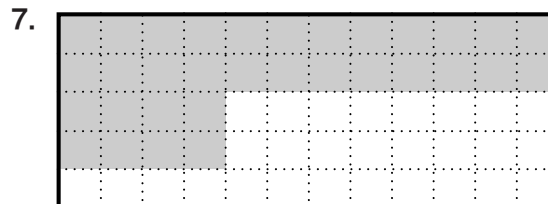
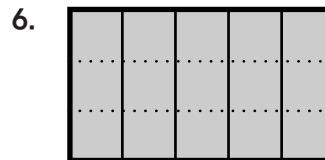


3. A. $\frac{1}{2}, \frac{3}{6}$

B. $\frac{2}{3}, \frac{4}{6}$

4. $\frac{4}{3}$ or $1\frac{1}{3}$

5. $\frac{10}{6}$ or $1\frac{4}{6}$ or $1\frac{2}{3}$ or $\frac{5}{3}$ or $\frac{20}{12}$ or $1\frac{8}{12}$



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Name _____ Date _____

5. If this is the unit whole, write a number for the shaded part below.

Unit Whole

6. If is $\frac{1}{5}$, show the unit whole.

7. If is $\frac{1}{3}$, show the unit whole.

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Teacher Guide

Parts and Wholes Quiz (TG pp. 1–2)
Questions 1–5

- A. No, all the pieces all not the same size.

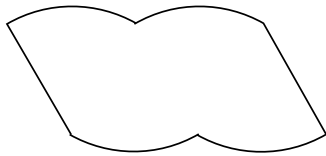
B. $\frac{1}{6}$ or one-sixth

C. $\frac{4}{6}$, four-sixths, $\frac{2}{3}$, or two-thirds

D. $\frac{1}{3}$ or one-third
- A. orange and aqua

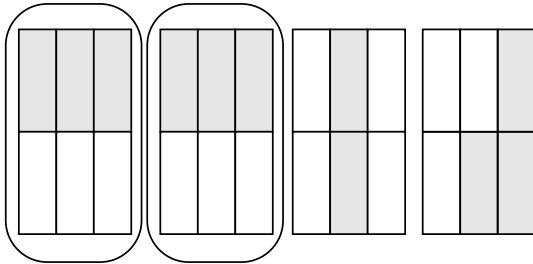
B. $\frac{1}{3}$ or one-third

C. $\frac{2}{3}$ or two-thirds
- A. Shapes will vary. One shape is shown.

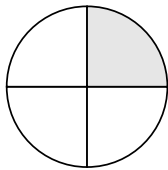


B. Shading on drawings will vary but must show $\frac{3}{4}$.

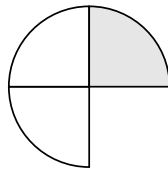
4. Possible response:



5. Joe and Moe ate the same size piece of cake.



$\frac{1}{4}$ of cake

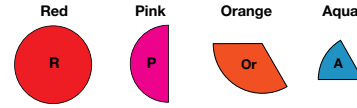


$\frac{1}{3}$ of cake left

Name _____ Date _____

Parts and Wholes Quiz

Use the red, pink, orange, and aqua pieces to answer the questions. Use the *Writing Numbers in Words* page in the *Student Guide Reference* section.



- The red circle is one unit whole. Cover it with four aquas and one orange.

A. Is the circle divided into fifths? Why or why not?

B. Write a fraction for one aqua. _____

C. Write a fraction for four aquas. _____

D. Write a fraction for one orange. _____
- The pink pieces is the unit whole. Cover it with two different colors.

A. What colors did you use? _____

B. Write a fraction in words for one aqua. _____

C. Write a fraction in words for one orange. _____

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Assessment Master

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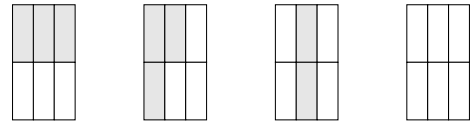
Name _____ Date _____

3. The aqua piece is one fourth.

A. Draw a shape for one whole.

B. Show three-fourths of your shape.

4. The large rectangle is the unit whole. Circle the large rectangles that show $\frac{1}{2}$. Show $\frac{1}{2}$ another way on the last rectangle.



5. Joe and Moe Smart each ate pieces of the same small cake. Joe Smart ate $\frac{1}{4}$ of the small cake. Moe ate $\frac{1}{3}$ of the cake that was left. Moe says he ate more cake than Joe. Do you agree with Moe? Why or why not? Show or tell how you decided.

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Assessment Master

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