Name _____ Date _____

Pieces Puzzles

- Guess which pieces from the second column will cover the piece in the first column. Write down your guess before you use the pieces.
- Solve the puzzle. Draw your solution in the last column.

Circle Piece to Cover	Possible Pieces	Guess	Solution
Example	Y, Y, B, Bk, Bk, Pk	2 yellows and 1 pink	Pk, Y, Y
1.	Y, B, B, Bk, Bk		
2.	B, Bk, Bk, Bk		
3.	Pk, B, B, B, Bk, Bk, Bk		
4.	Y, B, Bk, Y		

Find Equivalent Fractions SAB • Grade 5 • Unit 2 • Lesson 3 25

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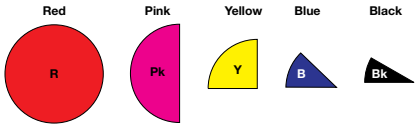
Name _____ Date _____

Use the red, pink, yellow, blue, and black pieces to answer the questions.



5. **A.** A yellow piece covers what fraction of a pink piece? _____
   B. A blue piece covers what fraction of a red piece? _____
   C. A black piece covers what fraction of a yellow piece? _____
6. **A.** Three blues cover what part of a pink piece? _____
   B. When you write the fraction for Question 6A, how do you know what denominator to use? What numerator?

   C. Three blues cover what part of a red circle? _____
   D. When you write the fraction for Question 6C, how do you know what denominator to use? What numerator?

7. **A.** A blue piece is $\frac{1}{2}$ of what circle piece? _____
   B. A blue piece is $\frac{1}{4}$ of what circle piece? _____
   C. A blue piece is $\frac{1}{8}$ of what circle piece? _____
8. If the red circle is the unit whole, write a number for each of the following:
   A. 5 blue pieces _____ **B.** 6 blue pieces _____
   C. 3 yellow pieces _____ **D.** 3 black pieces _____
   E. 4 yellow pieces _____ **F.** 12 black pieces _____

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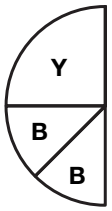
Student Activity Book

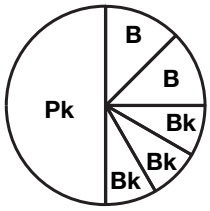
Pieces Puzzles (SAB pp. 25–26)
Questions 1–8

1.

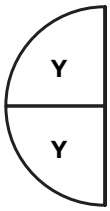


2.

3.*



4.



5. **A.** $\frac{1}{2}$
   B. $\frac{1}{8}$
   C. $\frac{1}{3}$
6. **A.** $\frac{3}{4}$
   B. Four blue pieces cover the whole pink piece, so the denominator is fourths. We used 3 blue pieces, so the numerator is 3.
   C. $\frac{3}{8}$
   D. Eight blue pieces cover the red circle, so the denominator is eighths. We used 3 blue pieces, so the numerator is 3.
7. **A.** yellow
   B. pink
   C. red
8. **A.** $\frac{5}{8}$ **B.** $\frac{6}{8}$
   C. $\frac{3}{4}$ **D.** $\frac{3}{12}$
   E. $\frac{4}{4}$ or 1 **F.** $\frac{12}{12}$ or 1

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

Equivalent Fractions Chart (SAB p. 27)

*See Figure 5 in the lesson.

Comparing Fraction Pieces (SAB pp. 29–30) Questions 1–10

	Color	How many cover the whole circle?	One piece is what fraction of the whole circle?	Which color takes MORE pieces to cover the whole circle?	Which color has SMALLER pieces?
Ex.	orange	3	$\frac{1}{3}$		
	yellow	4	$\frac{1}{4}$	×	×
1.	pink	2	$\frac{1}{2}$		
	orange	3	$\frac{1}{3}$	×	×
2.	yellow	4	$\frac{1}{4}$		
	aqua	6	$\frac{1}{6}$	×	×
3.	blue	8	$\frac{1}{8}$	×	×
	aqua	6	$\frac{1}{6}$		
4.	orange	3	$\frac{1}{3}$		
	blue	8	$\frac{1}{8}$	×	×
5.	black	12	$\frac{1}{12}$	×	×
	blue	8	$\frac{1}{8}$		
6.	pink	2	$\frac{1}{2}$		
	black	12	$\frac{1}{12}$	×	×

7. Answers will vary. Possible response: The more pieces it takes to cover the whole unit, the smaller the piece.

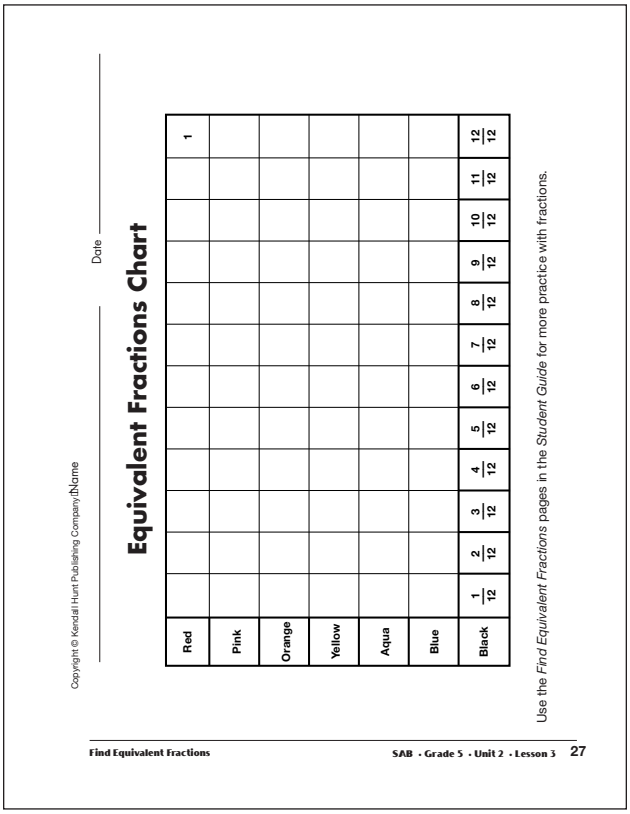
8. **A.** 1 green

   B. It takes less green pieces to cover the whole, so the pieces must be larger.

9. **A.** 1 gray

   B. It takes fewer gray pieces to cover the whole so each gray must be larger.

10. Possible response: $\frac{7}{8}$ is larger. $\frac{1}{8}$ is larger than $\frac{1}{12}$ because one blue is larger than one black. So 7 blues will be larger than 7 blacks and $\frac{7}{8}$ is larger than $\frac{7}{12}$ and $\frac{1}{12}$.



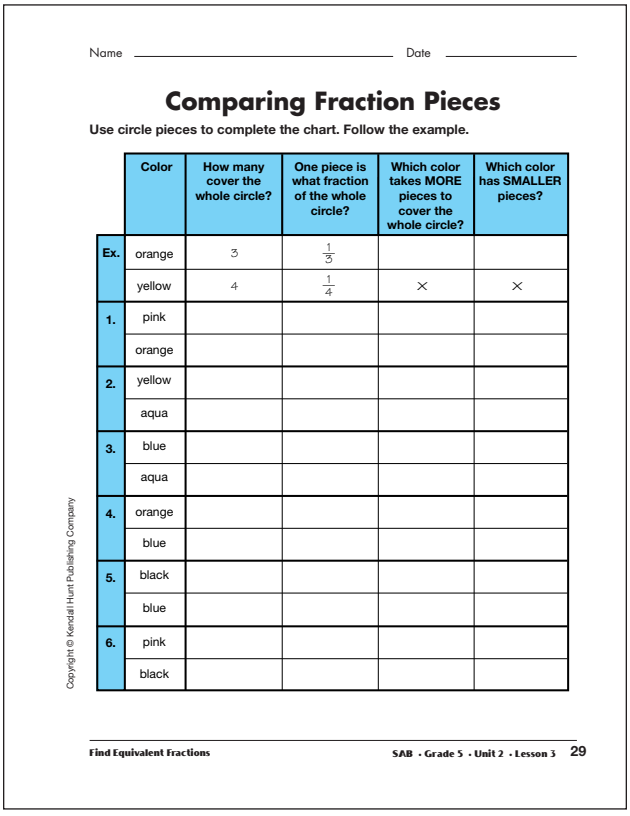
Name _____ Date _____

Equivalent Fractions Chart

Red	Pink	Orange	Yellow	Aqua	Blue	Black
1						$\frac{12}{12}$
						$\frac{11}{12}$
						$\frac{10}{12}$
						$\frac{9}{12}$
						$\frac{8}{12}$
						$\frac{7}{12}$
						$\frac{6}{12}$
						$\frac{5}{12}$
						$\frac{4}{12}$
						$\frac{3}{12}$
						$\frac{2}{12}$
						$\frac{1}{12}$

Use the *Find Equivalent Fractions* pages in the *Student Guide* for more practice with fractions.

***Student Activity Book* - Page 27**



Name _____ Date _____

Comparing Fraction Pieces

Use circle pieces to complete the chart. Follow the example.

	Color	How many cover the whole circle?	One piece is what fraction of the whole circle?	Which color takes MORE pieces to cover the whole circle?	Which color has SMALLER pieces?
Ex.	orange	3	$\frac{1}{3}$		
	yellow	4	$\frac{1}{4}$	×	×
1.	pink				
	orange				
2.	yellow				
	aqua				
3.	blue				
	aqua				
4.	orange				
	blue				
5.	black				
	blue				
6.	pink				
	black				

***Student Activity Book* - Page 29**

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

Name _____ Date _____

7. What can you say about the number of pieces and the size of the pieces it takes to cover the whole circle?

✓ **Check-In: Questions 8-10**

Solve the following problems without circle pieces.

8. Mr. Moreno made a shape with 20 green pieces. He covered the same shape with 40 purple pieces.
   - **A.** Which is larger, 1 purple or 1 green?
   - **B.** How do you know?

9. Mr. Moreno found some gray and maroon circle pieces in the storage room. Sixteen gray pieces cover a red circle. Seventeen maroon pieces cover a red circle.
   - **A.** Which is larger, 1 gray or 1 maroon?
   - **B.** How do you know?

10. Which fraction is larger, $\frac{7}{8}$ or $\frac{1}{12}$? Show or tell how you know.

***Student Activity Book* - Page 30**

Name _____ Date _____

Which is Larger

Homework

1. Use <, >, or = to write a true number sentence.
   - **A.** $\frac{1}{3}$ ◯ $\frac{1}{12}$
   - **B.** $\frac{1}{5}$ ◯ $\frac{1}{6}$
   - **C.** $\frac{2}{8}$ ◯ $\frac{2}{6}$
   - **D.** $\frac{50}{100}$ ◯ $\frac{1}{2}$

2. Tell how you decided which fraction is larger in Question 1A.

3. Mr. Hickman made a large apple pie. His daughter ate $\frac{1}{2}$ of the pie. His son ate $\frac{1}{3}$ of the pie. Who ate less? Draw a picture to show your thinking.

4. Jessica and Lee Yah shared a large pizza. Jessica ate $\frac{2}{6}$ of the pizza. Lee Yah ate $\frac{3}{6}$ of the pizza. Who ate more? Show or tell how you know.

5. Mathew and Cassandra shared a bag of candy. Mathew ate $\frac{1}{2}$ and Cassandra ate $\frac{5}{10}$. Who ate more? Show or tell how you know.

***Student Activity Book* - Page 31**

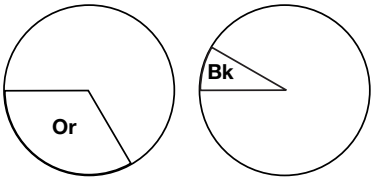
Which is Larger (SAB p. 31)

Homework

Questions 1–5

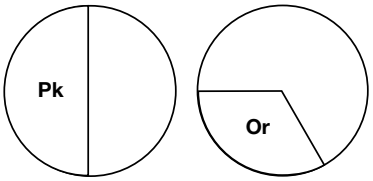
1. **A.** $\frac{1}{3} > \frac{1}{12}$ **B.** $\frac{1}{5} > \frac{1}{6}$
   C. $\frac{2}{8} < \frac{2}{6}$ **D.** $\frac{50}{100} = \frac{1}{2}$

2. Possible response: The larger the denominator, the smaller the fractional part.



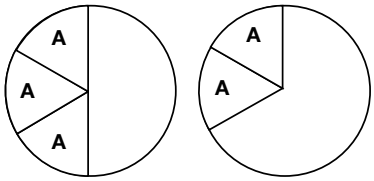
$\frac{1}{3}$ $\frac{1}{12}$

3. Mr. Hickman's son ate less.



daughter son

4. Lee Yah ate more.



Lee Yah Jessica

5. They ate the same amount.
   5 is half of 10 so $\frac{5}{10}$ is equal to $\frac{1}{2}$.