

LESSON 1

Objective

Identify and write fractions.

Common Core State Standards

- **3.NF.1** Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.

Number and Operations—Fractions

Identify and Write Fractions

Students have explored fractions in earlier grades and by this time should understand that a fraction shows a part of a whole. Here, students begin to divide that whole into smaller pieces. Identifying and writing fractions in this lesson will lay the foundation for students' work identifying fractions as parts of sets and finding equivalent fractions.

Try It! Perform the Try It! activity on the next page.

Talk About It

Discuss the Try It! activity.

- **Ask:** What does the bottom number, or denominator, mean in our fraction? What about the top number?
- **Say:** We use fractions to show a part or parts of a whole. **Ask:** Do you think it is important that all the parts of a fraction—like all 6 parts in the circle—are equal? Why or why not?
- **Ask:** What other fractions could you show using the sixths circle? How would you show one whole using sixths fraction pieces?

Solve It

With students, reread the problem. Have students trace the 6 parts of the circle onto white paper. Then have them label 2 pieces of the circle to show the slices of pizza William ate. Below the picture, they should write $\frac{2}{6}$.

More Ideas

For other ways to teach about identifying and writing fractions—

- Use Pattern Blocks to help build fraction sense. For example, have students select a hexagon and several triangles. Ask students to cover the hexagon with triangles. Then ask students to show $\frac{1}{6}$ of the hexagon using the triangles, then $\frac{2}{6}$, and so on. Repeat with the trapezoid.
- Have students use Deluxe Rainbow Fraction® Circles to create their own fraction models. Have students trace a whole circle, then use smaller pieces to trace within the circle, dividing it into equal parts. Students should then color some of the pieces to show a fraction of their choice.
- Have students use Geoboards to show fractions. Students should create a rectangle or square, then divide it evenly using other rubber bands.

Formative Assessment

Have students try the following problem.

What fraction of the circle is shaded?



- A. $\frac{3}{1}$ B. $\frac{2}{3}$ C. $\frac{1}{2}$ D. $\frac{1}{3}$

Try It! 25 minutes | Groups of 4

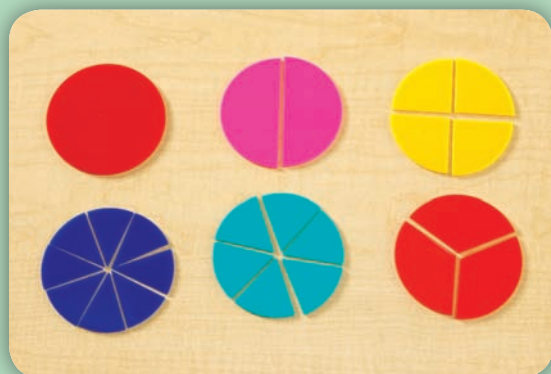
Here is a problem about identifying and writing fractions.

William's class had a pizza party on the last day of school. One of the pizzas was divided into 6 pieces. William ate 2 of the pieces. What fraction of the pizza did William eat?

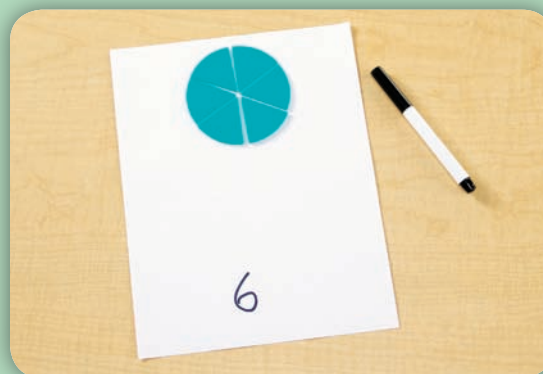
Introduce the problem. Then have students do the activity to solve the problem. Distribute Deluxe Rainbow Fraction Circles, paper, and pencils to groups of students.

Materials

- Deluxe Rainbow Fraction® Circles (1 set per group)
- paper (1 sheet per group)
- pencils (1 per group)



1. Say: *In the problem above, the pizza is divided into 6 pieces. Find the circle that is divided into 6 sections, or "sixths."* Have students look at the various circles and select the one that is divided into 6 sections.



2. Have students count the number of pieces in the fraction and write it on their paper. **Say:** *This number will become the denominator, or the bottom number of our fraction.*

⚠ Look Out!

Watch for students who mistakenly think they are "taking away" pieces of the circles. Have students trace the circles onto paper and color 4 of the pieces blue and 2 of the pieces yellow to represent $\frac{2}{6}$.



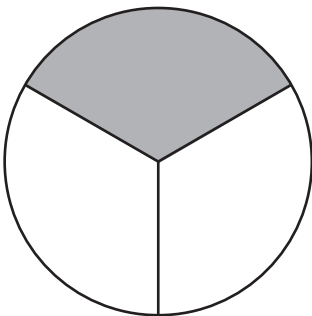
3. Ask students to find 2 slices of the sixths circle to show the 2 slices of pizza that William ate. **Say:** *This will become the numerator, or the top number of our fraction.* Instruct students to draw a line over the 6 on their paper and write a 2 on top of it.



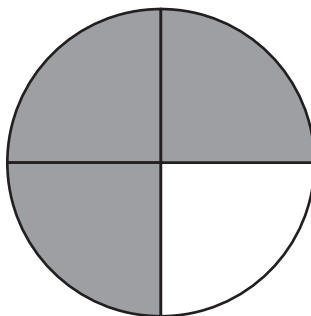
Use Fraction Circles to model each fraction.
Write each fraction.

(Check students' work.)

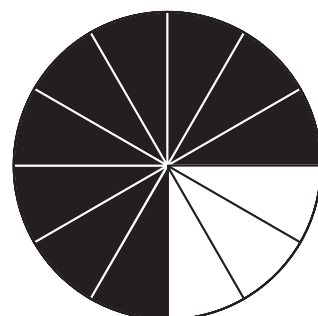
1.


 $\frac{1}{3}$

2.

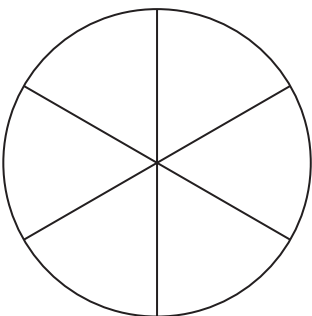
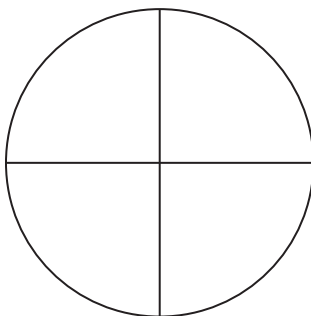
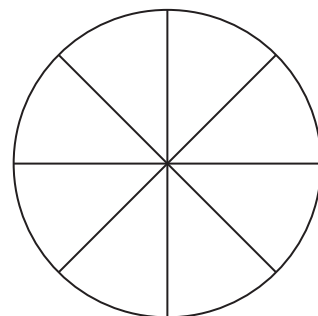

 $\frac{3}{4}$

3.

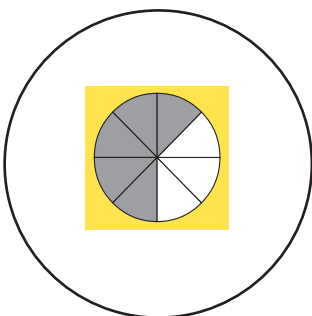
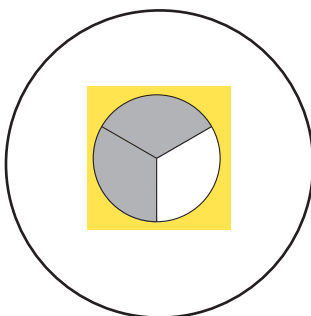
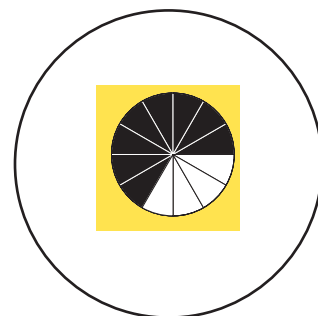

 $\frac{9}{12}$

Using Fraction Circles, model each fraction. Shade each circle to represent the fraction. Write the fraction.

(Check students' models.)

4. 5 sections of $\frac{1}{6}$ 
 $\frac{5}{6}$
5. 2 sections of $\frac{1}{4}$ 
 $\frac{2}{4}$
6. 3 sections of $\frac{1}{8}$ 
 $\frac{3}{8}$

Draw a model for each fraction.

7. $\frac{5}{8}$ 8. $\frac{2}{3}$ 9. $\frac{8}{12}$ 

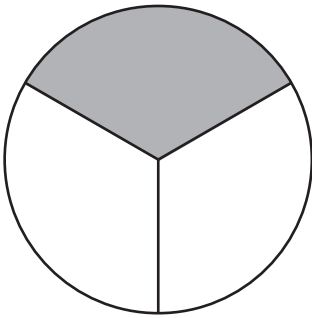
Answer Key

Challenge! Describe how you choose which set of Fraction Circles to use to model $\frac{5}{6}$.

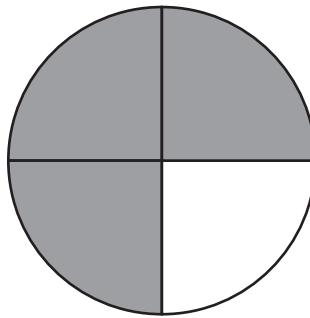
Challenge: (Sample) The number in the denominator needs to match the number of equal sections that make a whole circle.

**Use Fraction Circles to model each fraction.
Write each fraction.**

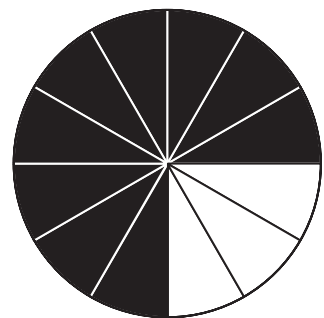
1.



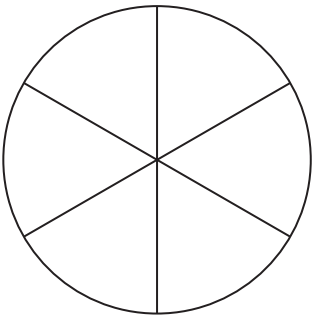
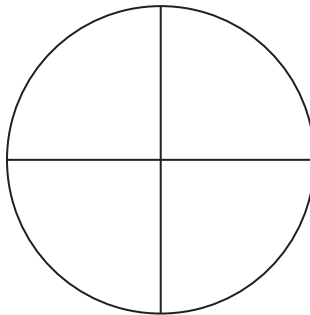
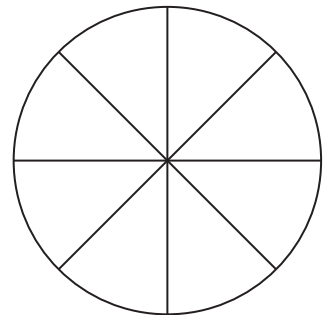
2.



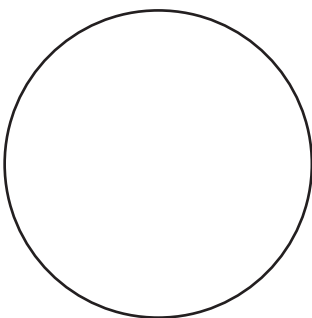
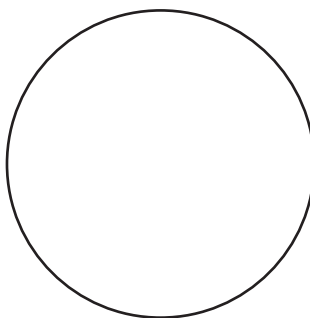
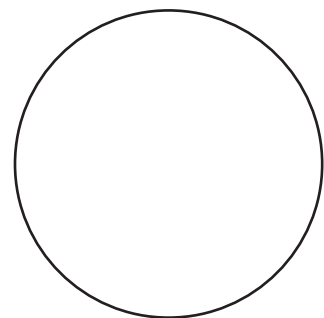
3.



Using Fraction Circles, model each fraction. Shade each circle to represent the fraction. Write the fraction.

4. 5 sections of $\frac{1}{6}$ 5. 2 sections of $\frac{1}{4}$ 6. 3 sections of $\frac{1}{8}$ 

Draw a model for each fraction.

7. $\frac{5}{8}$ 8. $\frac{2}{3}$ 9. $\frac{8}{12}$ 

Name _____

Challenge! Describe how you choose which set of Fraction Circles to use to model $\frac{5}{6}$.

© ETA hand2mind™

