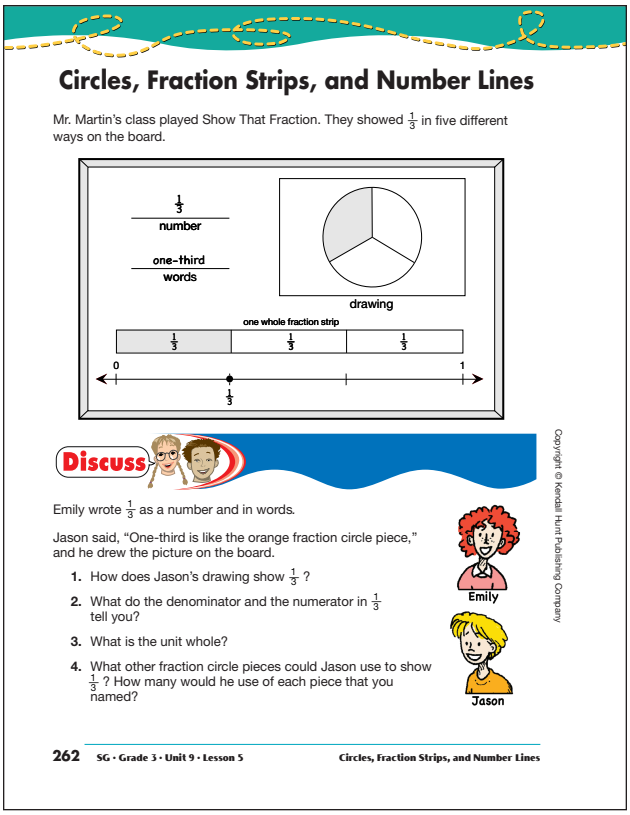

Circles, Fraction Strips, and Number Lines

Mr. Martin's class played Show That Fraction. They showed $\frac{1}{3}$ in five different ways on the board.

$\frac{1}{3}$
number

one-third
words

drawing

one whole fraction strip

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

0 $\frac{1}{3}$ 1

Discuss

Emily wrote $\frac{1}{3}$ as a number and in words.

Jason said, "One-third is like the orange fraction circle piece," and he drew the picture on the board.

1. How does Jason's drawing show $\frac{1}{3}$?
2. What do the denominator and the numerator in $\frac{1}{3}$ tell you?
3. What is the unit whole?
4. What other fraction circle pieces could Jason use to show $\frac{1}{3}$? How many would he use of each piece that you named?

Emily

Jason

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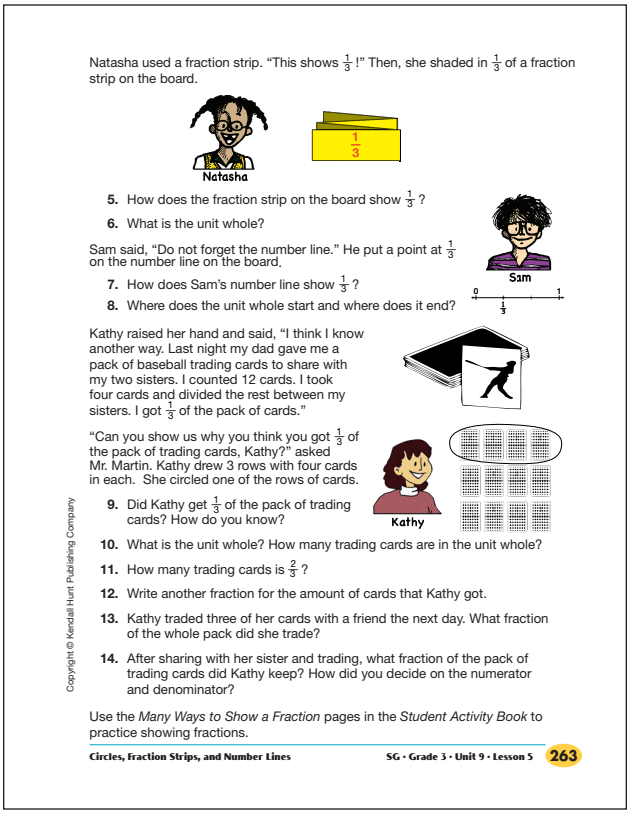

Natasha used a fraction strip. "This shows $\frac{1}{3}$!" Then, she shaded in $\frac{1}{3}$ of a fraction strip on the board.

Natasha

$\frac{1}{3}$

5. How does the fraction strip on the board show $\frac{1}{3}$?
6. What is the unit whole?

Sam said, "Do not forget the number line." He put a point at $\frac{1}{3}$ on the number line on the board.

Sam

0 $\frac{1}{3}$ 1

7. How does Sam's number line show $\frac{1}{3}$?
8. Where does the unit whole start and where does it end?

Kathy raised her hand and said, "I think I know another way. Last night my dad gave me a pack of baseball trading cards to share with my two sisters. I counted 12 cards. I took four cards and divided the rest between my sisters. I got $\frac{1}{3}$ of the pack of cards."

"Can you show us why you think you got $\frac{1}{3}$ of the pack of trading cards, Kathy?" asked Mr. Martin. Kathy drew 3 rows with four cards in each. She circled one of the rows of cards.

Kathy

9. Did Kathy get $\frac{1}{3}$ of the pack of trading cards? How do you know?
10. What is the unit whole? How many trading cards are in the unit whole?
11. How many trading cards is $\frac{2}{3}$?
12. Write another fraction for the amount of cards that Kathy got.
13. Kathy traded three of her cards with a friend the next day. What fraction of the whole pack did she trade?
14. After sharing with her sister and trading, what fraction of the pack of trading cards did Kathy keep? How did you decide on the numerator and denominator?

Use the *Many Ways to Show a Fraction* pages in the *Student Activity Book* to practice showing fractions.

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Student Guide

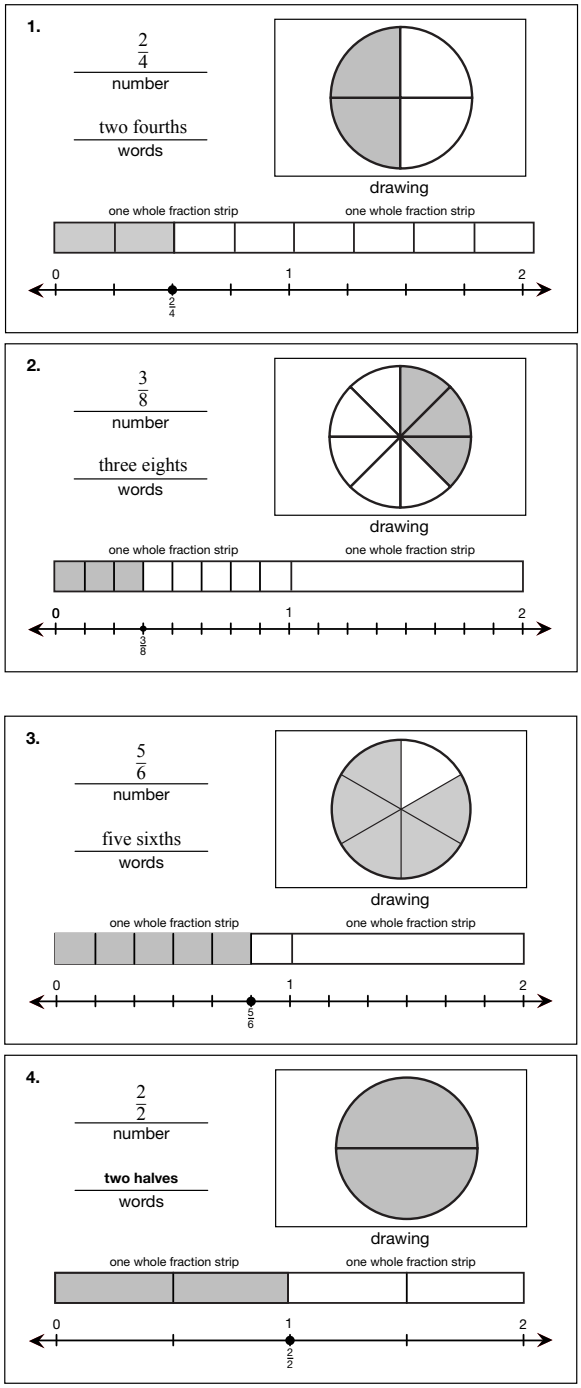
Circles, Fraction Strips, and Number Lines (SG pp. 262–263) Questions 1–14

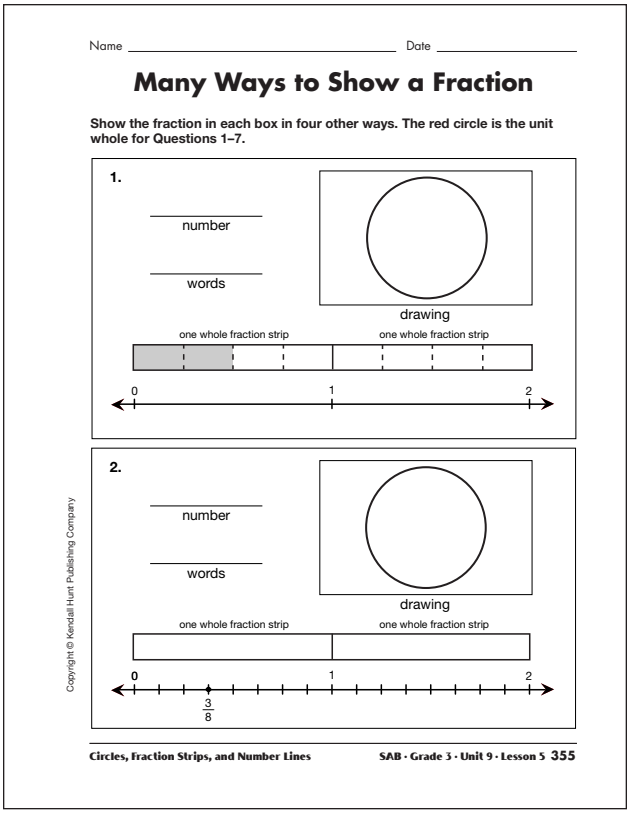
1. The circle is divided into 3 equal parts and Jason shaded one of the parts.
2. The denominator tells you the total number of pieces is three and the numerator says you are talking about 1 of those pieces.
3. The unit whole is the whole circle.
4. 2 aqua pieces (sixths)
5. The strip is divided into 3 equal parts and 1 of the parts is shaded.
6. The unit whole is the whole strip.
7. The space between 0 and 1 is divided into 3 equal parts. The number $\frac{1}{3}$ is written at the first of the 3 parts.
8. The unit whole starts at 0 and ends at 1.
9. Yes, Kathy divided the whole pack of cards into 3 equal parts and each part had 4 cards in it.
10. The unit whole is the whole pack of trading cards. There are 12 cards in the whole pack.
11. 8 cards
12. $\frac{4}{12}$
13. $\frac{3}{12}$ or $\frac{1}{4}$
14. $\frac{1}{12}$; the denominator is the total number of cards which is 12, and she kept 1 of the cards so the numerator is 1.

Student Activity Book

Many Ways to Show a Fraction (SAB pp. 355–358) Questions 1–8

Possible responses:




Name _____ Date _____

Many Ways to Show a Fraction

Show the fraction in each box in four other ways. The red circle is the unit whole for Questions 1–7.

1. number, words, drawing, one whole fraction strip, one whole fraction strip, 0, 1, 2

2. number, words, drawing, one whole fraction strip, one whole fraction strip, 0, 1, 2, 3/8

Circles, Fraction Strips, and Number Lines SAB · Grade 3 · Unit 9 · Lesson 5 355

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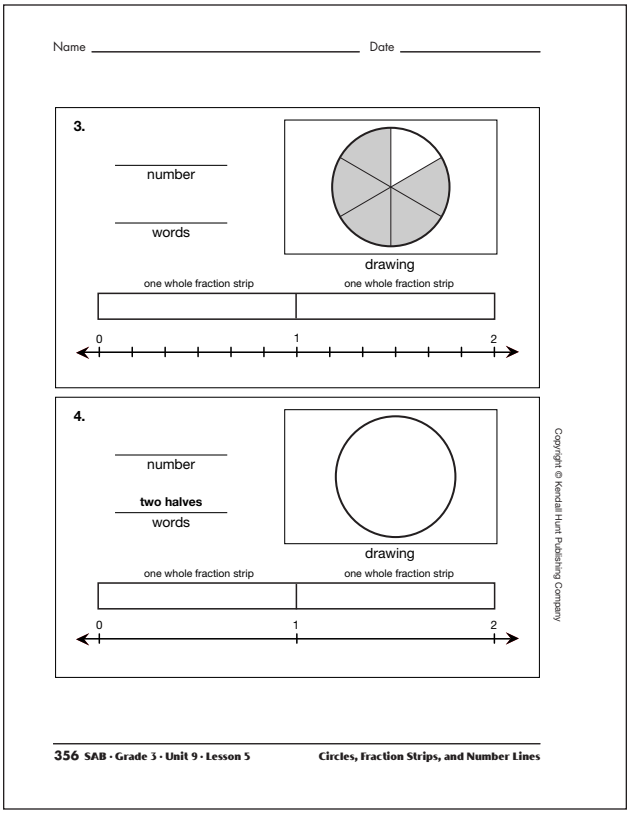
Name _____ Date _____

3. number, words, drawing, one whole fraction strip, one whole fraction strip, 0, 1, 2

4. number, two halves, words, drawing, one whole fraction strip, one whole fraction strip, 0, 1, 2

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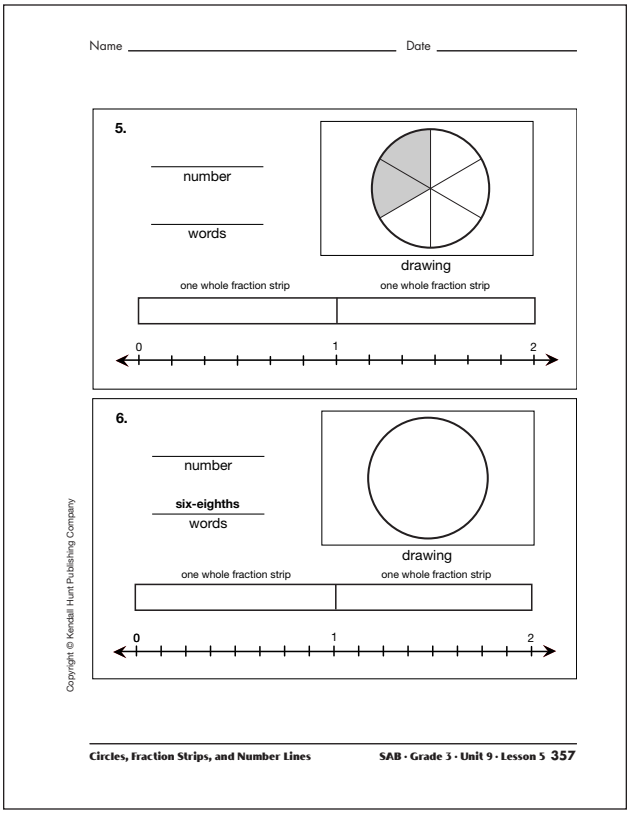
***Student Activity Book* - Page 356**


Name _____ Date _____

5.

_____ number

_____ words

drawing

one whole fraction strip | one whole fraction strip

0 1 2

6.

number

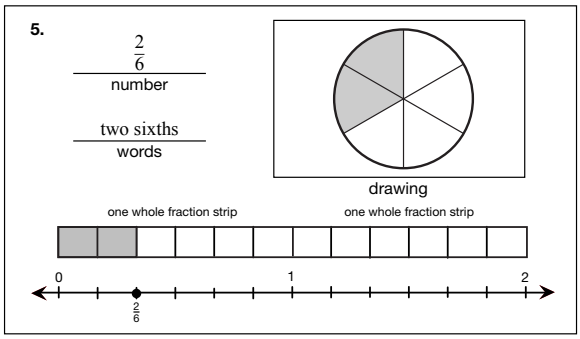
six-eighths words

drawing

one whole fraction strip | one whole fraction strip

0 1 2

Circles, Fraction Strips, and Number Lines SAB • Grade 3 • Unit 9 • Lesson 5 357


5.

$\frac{2}{6}$ number

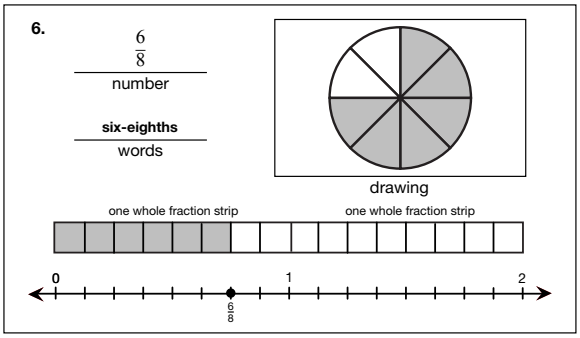
two sixths words

drawing

one whole fraction strip | one whole fraction strip

0 1 2

$\frac{2}{6}$


6.

$\frac{6}{8}$ number

six-eighths words

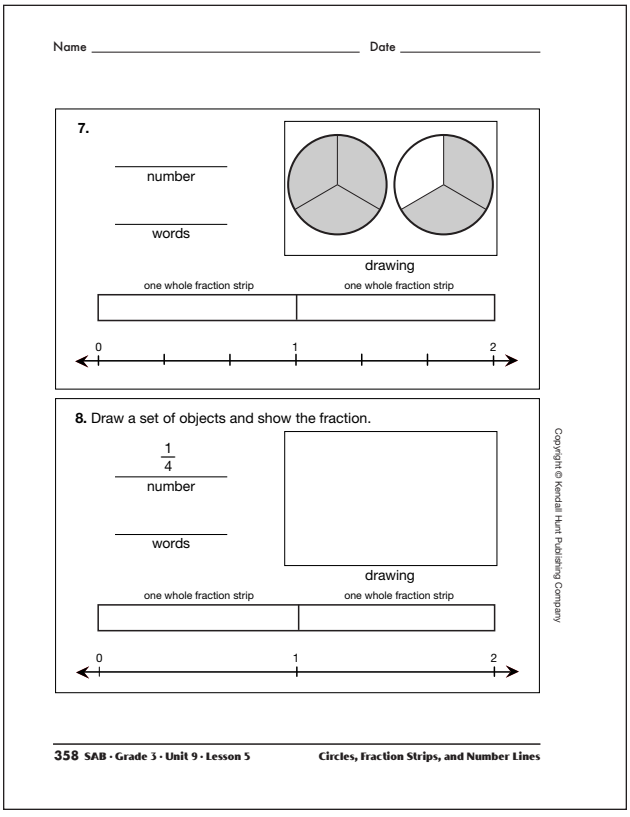
drawing

one whole fraction strip | one whole fraction strip

0 1 2

$\frac{6}{8}$

***Student Activity Book* - Page 357**


Name _____ Date _____

7.

_____ number

_____ words

drawing

one whole fraction strip | one whole fraction strip

0 1 2

8. Draw a set of objects and show the fraction.

$\frac{1}{4}$ number

_____ words

drawing

one whole fraction strip | one whole fraction strip

0 1 2

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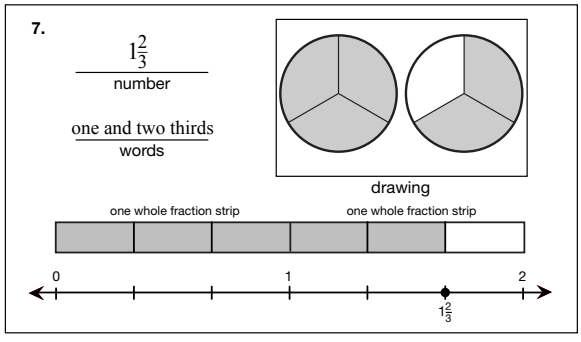

7.

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

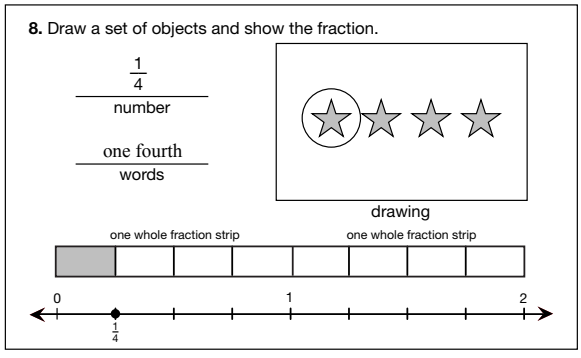
one and two thirds words

drawing

one whole fraction strip | one whole fraction strip

0 1 2

$1\frac{2}{3}$


8. Draw a set of objects and show the fraction.

$\frac{1}{4}$ number

one fourth words

drawing

one whole fraction strip | one whole fraction strip

0 1 2

$\frac{1}{4}$

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