## Unit 4 Lesson 5: How Many Groups? (Part 2) <br> 1 Reasoning with Fraction Strips (Warm up) <br> Student Task Statement

Write a fraction or whole number as an answer for each question. If you get stuck, use the fraction strips. Be prepared to share your reasoning.

1. How many $\frac{1}{2}$ s are in 2 ?
2. How many $\frac{1}{5}$ s are in 3 ?
3. How many $\frac{1}{8}$ s are in $1 \frac{1}{4}$ ?
4. $1 \div \frac{2}{6}=$ ?
5. $2 \div \frac{2}{9}=$ ?
$6.4 \div \frac{2}{10}=$ ?


## 2 More Reasoning with Pattern Blocks

## Student Task Statement

Your teacher will give you pattern blocks. Use them to answer the questions.

1. If the trapezoid represents 1 whole, what do each of the other shapes represent? Be prepared to show or explain your reasoning.

2. Use pattern blocks to represent each multiplication equation. Use the trapezoid to represent 1 whole.
a. $3 \cdot \frac{1}{3}=1$
b. $3 \cdot \frac{2}{3}=2$
3. Diego and Jada were asked "How many rhombuses are in a trapezoid?"

- Diego says, " $1 \frac{1}{3}$. If I put 1 rhombus on a trapezoid, the leftover shape is a triangle, which is $\frac{1}{3}$ of the trapezoid."
- Jada says, "I think it's $1 \frac{1}{2}$. Since we want to find out 'how many rhombuses,' we should compare the leftover triangle to a rhombus. A triangle is $\frac{1}{2}$ of a rhombus."

Do you agree with either of them? Explain or show your reasoning.
4. Select all the equations that can be used to answer the question: "How many rhombuses are in a trapezoid?"

- $\frac{2}{3} \div ?=1$
- $1 \div \frac{2}{3}=$ ?
- $? \div \frac{2}{3}=1$
- ? $\cdot \frac{2}{3}=1$
- $1 \cdot \frac{2}{3}=$ ?


## Activity Synthesis



## 3 Drawing Diagrams to Show Equal-sized Groups (Optional)

## Student Task Statement

For each situation, draw a diagram for the relationship of the quantities to help you answer the question. Then write a multiplication equation or a division equation for the relationship. Be prepared to share your reasoning.

1. The distance around a park is $\frac{3}{2}$ miles. Noah rode his bicycle around the park for a total of 3 miles. How many times around the park did he ride?
2. You need $\frac{3}{4}$ yard of ribbon for one gift box. You have 3 yards of ribbon. How many gift boxes do you have ribbon for?
3. The water hose fills a bucket at $\frac{1}{3}$ gallon per minute. How many minutes does it take to fill a 2-gallon bucket?
