

Lesson 5: Relate Division and Fractions

- Let's explain the relationship between division and fractions.

Warm-up: True or False: Interpret Fractions

Decide if each statement is true or false. Be prepared to explain your reasoning.

- $5 \div 2 = \frac{5}{2}$

- $\frac{5}{2} = 5\frac{1}{2}$

- $\frac{6}{2} = 3$

5.1: Relate Pounds to People

	Each person gets _____ pound(s) of blueberries.			
	more than 1	exactly 1	less than 1	$\frac{1}{2}$
_____ people share 7 pounds of blueberries	<input checked="" type="checkbox"/>			
_____ people share _____ pounds of blueberries		<input checked="" type="checkbox"/>		
Three people share _____ pounds of blueberries			<input checked="" type="checkbox"/>	
_____ people share _____ pounds of blueberries				<input checked="" type="checkbox"/>

1. Fill in the blanks to match the rules in the table.
2. How many pounds of blueberries did each person get when they got more than 1 pound of blueberries?
3. How many pounds of blueberries did each person get when they got less than 1 pound of blueberries?

(Pause for teacher directions.)

- Work with your group to make a poster that shows or explains your thinking about the questions below.
 - What is true about all of the pairs of numbers that were used when each person got less than 1 pound of blueberries?
 - What is true about all of the pairs of numbers that were used when each person got more than 1 pound of blueberries?
 - What is true about all of the pairs of numbers that were used when each person gets exactly $\frac{1}{2}$ pound of blueberries?

5.2: Why Does It Work?

1. What numbers can replace the question marks in each equation? Explain your reasoning.

$$? \div 2 = \frac{?}{2} \qquad 2 \div ? = \frac{2}{?}$$

(Pause for teacher directions.)

2. Work with your partner to explain why any division expression can be interpreted as a fraction. You can use diagrams, expressions, equations, and words.

Section Summary

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We learned that there is a relationship between division and fractions.

We can see this relationship in diagrams, situations, and equations. This diagram represents 2 sandwiches being shared equally by 5 people. Each person will get $\frac{2}{5}$ of a sandwich. The equation, $2 \div 5 = \frac{2}{5}$ also represents the situation.

