Trouble for Trevor

Trevor yawned. He'd been waiting for his older brother Matt to get home from baseball practice for half an hour. Matt was supposed to help him with the trouble he was having with fractions. This was going to be so boring.

He spotted Matt coming down the sidewalk.

"What's wrong?" Matt asked as they went into the house.

"I wish we didn't have to work on fractions today. I'd rather practice my pitching with you instead." Trevor said.

"You might be surprised how much fun we can have with fractions. Besides, you know it's one of those important things you have to learn, so we'll make the best of it, OK?"

After Matt changed clothes, they got started. "First," said Matt, "you have to remember that a fraction is a part of something. Got that? It always shows a part of something."

"Okay," said Trevor. "Fractions always show a part of something."

"Let's start with parts of a group," said Matt. "Get out some of your marbles, different amounts of each color."

Trevor got a big container of marbles down off of a shelf. As he got ready to dump them all out, Matt stopped him.

"Not that many! We'll be here all night if we have to count all of those. Just get out one of one color, three of another color, four of a third color, and five of a fourth color."

Trevor counted out the marbles and took them to Matt.

"Now, get some paper," said Matt.

Trevor groaned. He hated working out problems on paper.

“Okay,” said Matt. “First count how many marbles you have total and write down that number.”

Trevor did.

“In a fraction, the bottom number of the fraction, called the denominator, is the total number of things you have. What will your denominator for this fraction be?”

Trevor said, “The denominator is 13.”

“Right. Write down a line for your fraction, called a fraction bar, and put the bottom number, the denominator, down as 13.”

$$\frac{}{13}$$

“What part of the total number of marbles are red?” asked Matt.

“One of the marbles,” said Trevor.

“That’s right,” said Matt. “How do we show that as a fraction?”

Trevor just looked at his brother.

“Let me show you a trick,” said Matt. “The line in a fraction, the fraction bar, can mean different things. In a division problem, it can mean ‘divide.’ But in a fraction, it can mean the word ‘of.’

“So let’s think of our problem this way. The top number, the numerator, shows how many parts of the total group we are working with. We have 1 red marble out of 13 marbles total. The red marbles are 1 <u>of</u> 13. We can show it this way.”

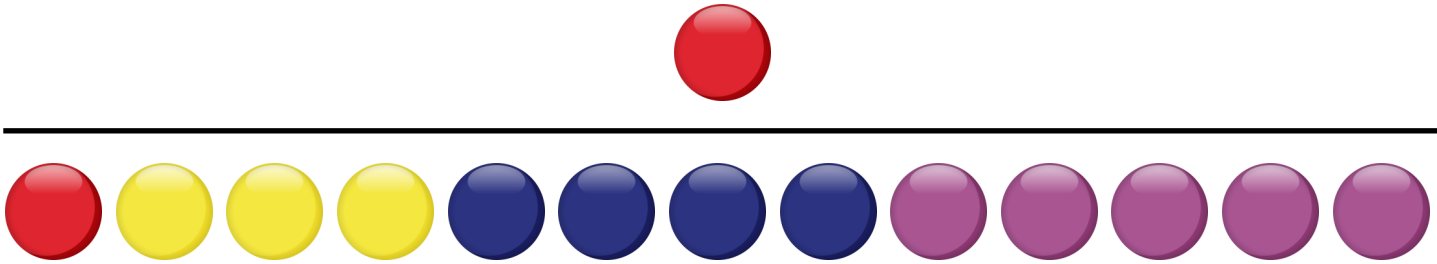
$$\frac{1}{13}$$

Red marble (numerator)

of

Total marbles (denominator)

OR



Now it's your turn:

Can you write the fraction for how many yellow marbles there are?

Now, write the fraction for how many blue marbles there are.

Last, write the fraction for how many purple marbles there are.

Let's get back to Trevor and Matt.

“Great, thanks Matt,” Trevor said as he got up.

“Whoa, buddy,” said Matt. “We’re just getting started.”

“But, I get it now,” said Trevor. “I really have lots of other things to do.”

“Do you remember what the top number and the bottom number of the fraction are called? What about the line that divides the top number and the bottom number?” asked Matt. “What about how to tell how much of something you have if you cut it into pieces? Do you know how much you would have to give someone if they asked for one-third of your cookies? “

“Well, . . . no,” said Trevor.

“Then, let’s get busy,” said Matt.

“But, Matt, it’s lunch time, and I’m really hungry.”

“Perfect, there’s a pizza in the refrigerator we can warm up,” said Matt. “We can practice some more while we eat.”

Trevor smiled. At least if he had to spend the day learning math, he could eat pizza while he did it.

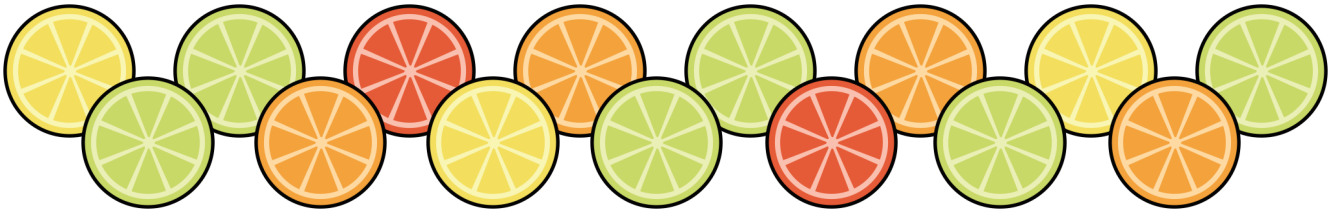
“Okay, look at the pizza,” Matt said after he heated it and cut it into 6 equal pieces. “If you eat one piece and I eat 5 pieces, what fraction of the pizza is yours?”

“Hang on,” said Trevor. “I get more than just 1 piece of pizza.”

“It was worth a try,” Matt said, laughing. “But, just for the sake of fractions, what fraction of the pizza is 1 piece and what fraction of the pizza is 5 pieces?”

Worksheet 3

There is a plate with 14 slices of fruit on the table. Write the answer to the questions.



1. What fraction would 5 slices of fruit equal? Write the fraction.

	Slices	(numerator)
_____	of	
	Total slices	(denominator)

2. What fraction would 7 slices of fruit equal? Write the fraction.

(numerator)

_____

(denominator)

3. What fraction would 3 slices of fruit equal? Write the fraction.

(numerator)

_____

(denominator)

4. What fraction would 8 slices of fruit equal? Write the fraction.

(numerator)

_____

(denominator)

5. What fraction would 2 slices of fruit equal? Write the fraction.

(numerator)

_____

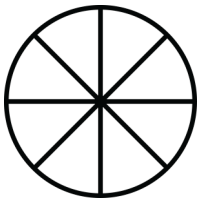
(denominator)

Worksheet 13

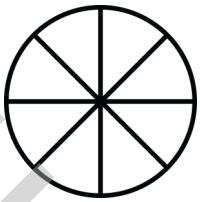
When you are working with fractions that have the same denominator, you know which is larger by checking the numerator. If denominators are the same, the larger numerator makes the larger fraction.

Answer the questions.

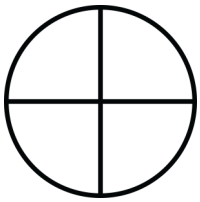
1. Circle the fraction that is larger. Show your answer on the circles given.



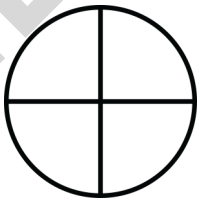
$\frac{5}{8}$ $\frac{3}{8}$



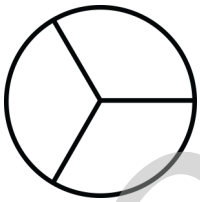
2. Circle the fraction that is smaller. Show your answer on the circles given.



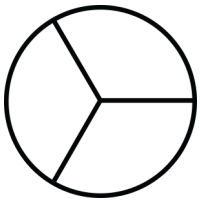
$\frac{3}{4}$ $\frac{2}{4}$



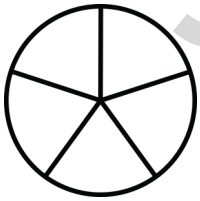
3. Circle the fraction that is larger. Show your answer on the circles given.



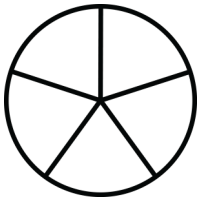
$\frac{1}{3}$ $\frac{2}{3}$



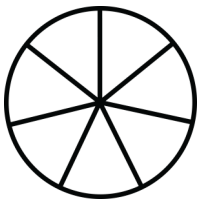
4. Circle the fraction that is larger. Show your answer on the circles given.



$\frac{4}{5}$ $\frac{2}{5}$



5. Circle the fraction that is smaller. Show your answer on the circles given.



$\frac{3}{7}$ $\frac{4}{7}$