Name $\qquad$

$\qquad$

## Try This

- Use Fraction Circle pieces to model each fraction.
- Put the fraction models together on the circle.
- Draw a picture of both fractions to show the sum.
- Write the sums.


1. $\frac{1}{8}+\frac{1}{8}=$ $\qquad$

2. $\frac{3}{8}+\frac{4}{8}=$ $\qquad$

3. $\frac{1}{4}+\frac{1}{4}=$ $\qquad$

4. $\frac{2}{8}+\frac{3}{8}=$ $\qquad$

5. $\frac{1}{8}+\frac{4}{8}=$ $\qquad$

6. $\frac{2}{8}+\frac{4}{8}=$ $\qquad$

$\qquad$
Use Fraction Circles to build the model. Write the addends and the sum the model shows.
7. 



Use Fraction Circles to model the given addends. Join the pieces to find the sum. Sketch the model and write the sum.
2.

$\frac{4}{8}$

$+\quad \frac{2}{8}$
$=$

$\qquad$
3. Model the sum from Exercise 2 in simplest form.

Sketch the model. Write the sum.

Find each sum. Write the answer in simplest form.
4. $\frac{1}{3}+\frac{1}{3}=$ $\qquad$
6. $\frac{1}{4}+\frac{1}{4}=$ $\qquad$ $=$ $\qquad$
8. $\frac{2}{10}+\frac{3}{10}=$ $\qquad$ $=$ $\qquad$
5. $\frac{4}{8}+\frac{3}{8}=$ $\qquad$
7. $\frac{3}{6}+\frac{1}{6}=$ $\qquad$ $=$ $\qquad$
9. $\frac{3}{12}+\frac{6}{12}=$ $\qquad$ $=$ $\qquad$
$\qquad$

Mental Math!
Estimate the following sums, using mental math.
a. $\frac{1}{7}+\frac{1}{9} \quad$ Is the sum closer to 0 or to 1 ?
b. $\frac{3}{4}+\frac{1}{9} \quad$ Is the sum closer to 1 or 2 ?
c. $\frac{7}{8}+\frac{3}{4} \quad$ Is the sum closer to 1 or 2 ?
$\qquad$

## Try This

- Use Fraction Tower Cubes to model each fraction.
- Put the Fraction Towers together and show the sum on the tower outlines below.
- Show the sum with fewer same-color cubes, if possible, in the last tower outline.

$$
\begin{aligned}
& \text { Addend }+ \text { Addend }=\quad \text { Sum } \\
&=\text { Sum in } \\
& \text { simplest form }
\end{aligned}
$$

- Write the sum in simplest form.

1. $\frac{5}{6}+\frac{3}{6}=$ $\qquad$ $=$ implest form
2. $\frac{3}{8}+\frac{6}{8}=$ $\qquad$ $=$ $\qquad$
3. $\frac{3}{5}+\frac{3}{5}=$ $\qquad$ $=$ $\qquad$
4. $\frac{3}{6}+\frac{4}{6}=$ $\qquad$ $=$ $\qquad$
5. $\frac{7}{10}+\frac{5}{10}=$ $\qquad$ $=$ $\qquad$
6. $\frac{5}{8}+\frac{5}{8}=$ $\qquad$ $=$ $\qquad$
7. $\frac{9}{12}+\frac{7}{12}=$ $\qquad$ $=$ $\qquad$

## Challenge

$\frac{7}{8}+\frac{1}{8}+\frac{5}{8}=$ $\qquad$ $=$ $\qquad$
$\qquad$

Use Fraction Tower Cubes to build the model. Write the addends and the sum. Then write the sum as a mixed number in simplest form.
1.

$\qquad$ $+$ $\qquad$ $=$ $\qquad$ $=$ $\qquad$
Use Fraction Tower Cubes to model the addends. Join the pieces to find the sum. Sketch the model and write the sum. Then write the sum as a mixed number in simplest form.
2.


$$
\frac{8}{10}+\frac{4}{10}=\square=
$$

Find each sum. Write the answer as a mixed number in simplest form.
3. $\frac{3}{8}+\frac{6}{8}=$ $\qquad$
5. $\frac{4}{6}+\frac{5}{6}=$ $\qquad$ $=$ $\qquad$
7. $\frac{5}{8}+\frac{6}{8}=$ $\qquad$ $=$ $\qquad$
4. $\frac{4}{5}+\frac{2}{5}=$ $\qquad$
$\qquad$
6. $\frac{6}{10}+\frac{6}{10}=\square=$ $\qquad$
8. $\frac{8}{12}+\frac{6}{12}=$ $\qquad$ $=$ $\qquad$

Name $\qquad$
3
Use two of these cards to make the fraction that is

a. closest to 1 .
b. closest to $\frac{1}{5}$.
c. closest to 5 .
$\qquad$

## Try This

- Use Fraction Circle pieces to model and draw the first fraction.
- Draw arrows to show the fraction pieces taken away.
- Write the difference.
Model first fraction. Take away.
Write the difference.


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


2. $\frac{7}{8}-\frac{4}{8}=$ $\qquad$

3. $\frac{4}{6}-\frac{3}{6}=$ $\qquad$

4. $\frac{8}{12}-\frac{3}{12}=$ $\qquad$

5. $\frac{5}{8}-\frac{3}{8}=$ $\qquad$

6. $\frac{5}{6}-\frac{2}{6}=$ $\qquad$


## Challenge

Look at problems 5 and 6 above. Model, draw, and write the differences in simplest form.

Name $\qquad$

## Use Fraction Circles to build the model. Subtract the second fraction from the first. Write the difference.

1. $\frac{7}{12}-\frac{5}{12}=\frac{}{12}$

2. $\frac{4}{6}-\frac{2}{6}=\frac{}{6}$


Use Fraction Circles to model the problem.
Draw the model. Write the difference.
3. $\frac{3}{4}-\frac{2}{4}=$ $\qquad$

4. $\frac{4}{5}-\frac{1}{5}=$ $\qquad$


Find each difference.
5. $\frac{6}{8}-\frac{3}{8}=$ $\qquad$
5
6. $\frac{7}{10}-\frac{3}{10}=$ $\qquad$ 7. $\frac{7}{8}-\frac{2}{8}=$ $\qquad$

Name $\qquad$
4
Write these as mixed numbers.
a. 2.4
b. 13.7
c. 9.04
d. 11.9
$\qquad$

## Try This

- Use Fraction Towers and the Fraction Number Line.
- Model the addition sentence.
- Arrange the towers if needed.
- Sketch your model and write the sum.

1. $1 \frac{1}{3}+1 \frac{1}{3}=$ $\qquad$

2. $2 \frac{1}{5}+1 \frac{1}{5}=$ $\qquad$

3. $1 \frac{1}{2}+1 \frac{1}{2}=$ $\qquad$ -_ـ_


Find the sum. Write your answer as a mixed number.
4. $1 \frac{3}{6}+1 \frac{1}{6}=$ $\qquad$
5. $1 \frac{5}{8}+1 \frac{7}{8}=$ $\qquad$
6. $4 \frac{1}{4}+2 \frac{3}{4}=$ $\qquad$
7. $3 \frac{1}{10}+5 \frac{3}{10}=$ $\qquad$
8. $6 \frac{7}{12}+2 \frac{1}{12}=$ $\qquad$
$\qquad$

Use Fraction Towers to build the model on the Fraction Number Line. Fill in the blanks.

1. $1 \frac{2}{6}+1 \frac{3}{6}=1+1+\frac{2}{6}+\frac{3}{6}=$ $\qquad$

2. $1 \frac{1}{5}+\frac{3}{5}=$ $\qquad$ $+$ $\qquad$ $+$ $\qquad$ $=$ $\qquad$


Use Fraction Towers to model the problem on the Fraction Number Line. Sketch the model. Fill in the blanks.
3. $1 \frac{2}{10}+2 \frac{1}{10}=$ $\qquad$ $+$ $\qquad$ $+$ $\qquad$ $+$ $\qquad$ $=$ $\qquad$

4. $1 \frac{1}{4}+1 \frac{2}{4}=$ $\qquad$ $+$ $\qquad$ $+$ $\qquad$ $=$


Write the sum.
5. $1 \frac{2}{6}+5 \frac{1}{6}=$ $\qquad$
6. $3 \frac{5}{10}+2 \frac{3}{10}=$ $\qquad$
7. $4 \frac{3}{6}+3 \frac{2}{6}=$ $\qquad$
8. $1 \frac{3}{4}+2 \frac{1}{4}=$ $\qquad$
$\qquad$
5
A number line is shown below.

a. Show the location of $\frac{3}{4}$.
b. Show the location of $1 \frac{1}{2}$.
c. Show the location of $3 \frac{3}{4}$.
$\qquad$

## Try This

- Use Fraction Towers and the Fraction Number Line to model the first number.
- Subtract the second number by removing Fraction Tower Cubes.
(You might have to rename a whole using unit cubes.)
- Write the difference.

1. $2 \frac{4}{5}-1 \frac{2}{5}=$ $\qquad$

2. $1 \frac{2}{3}-1 \frac{1}{3}=$ $\qquad$

3. $1 \frac{1}{6}-\frac{5}{6}=$ $\qquad$


Find each difference.
4. $1 \frac{7}{12}-1 \frac{5}{12}=$ $\qquad$
5. $2 \frac{5}{10}-1 \frac{3}{10}=$
6. $3 \frac{5}{10}-1 \frac{3}{10}=$ $\qquad$
7. $4 \frac{7}{12}-1 \frac{1}{12}=$ $\qquad$
8. $9 \frac{1}{8}-4 \frac{5}{8}=$ $\qquad$
$\qquad$

Use Fraction Towers to build the model on the Fraction Number Line. Subtract by removing cubes. Cross out the cubes on the drawing that you subtract. Write the difference.

1. $2 \frac{7}{8}-1 \frac{1}{8}=$ $\qquad$

2. $1 \frac{3}{4}-1 \frac{1}{4}=$ $\qquad$


Use Fraction Towers to model the first number on the Fraction Number Line. Sketch the model. Subtract by removing cubes and by crossing out cubes on the sketch. Write the difference.
3. $1 \frac{2}{3}-\frac{1}{3}=$ $\qquad$

4. $2 \frac{1}{5}-1 \frac{2}{5}=$ $\qquad$


Find each difference.
5. $1 \frac{3}{4}-1 \frac{1}{4}=$ $\qquad$ 6. $3 \frac{7}{10}-1 \frac{4}{10}=$ $\qquad$
7. $5 \frac{1}{4}-3 \frac{3}{4}=$ $\qquad$ 8. $6 \frac{3}{12}-1 \frac{8}{12}=$
$\qquad$
a. How many days are there in 10 weeks?
b. How many weekdays are there in 10 weeks?
c. How many weekend days are there in 10 weeks?

6 Add Tenths and Hundredths
Name $\qquad$

## Try This

- Use Base Ten Blocks to model the addends.
- Rename tenths as hundredths.
- Combine the models to find the sum.

is 1 whole.

1. $\frac{4}{10}+\frac{2}{100}=\frac{}{100}+\frac{}{100}=$ $\qquad$
2. $\frac{5}{10}+\frac{4}{100}=$ $\qquad$ $+\ldots=$ $\qquad$
3. $\frac{1}{100}+\frac{7}{10}=$ $\qquad$ $+$ $\qquad$ $=$
4. $\frac{9}{100}+\frac{6}{10}=$ $\qquad$ $+$ $\qquad$ $=$ $\qquad$
5. $\frac{1}{10}+\frac{11}{100}=$ $\qquad$ $+$ -
6. Look at problems 1-5. Do you see a pattern that helps you rename tenths as hundredths? Without using Base Ten Blocks, explain how you would rename $\frac{8}{10}$ as hundredths.
$\qquad$
$\qquad$
$\qquad$ is 1 whole. is $\frac{1}{10}$. © is $\frac{1}{100}$.

## Use Base Ten Blocks to build the model. Fill in the blanks.

1. 

$\frac{\text { MmWm }}{\text { mmmma }}+\square \square$


$$
\frac{2}{10}+\frac{2}{100}
$$

$=\quad \frac{20}{100}+\frac{2}{100}$
2.


$\qquad$ $=$ $\qquad$
$\qquad$ = $\qquad$

Use Base Ten Blocks to model the given addends. Sketch the model and write the sum.
3.
4.

$\frac{5}{10}$


$+$

$\frac{3}{100}$
$=$

$=$

$+$

$=$
$\frac{32}{100}$
-
$\qquad$

Find each sum.
5. $\frac{4}{10}+\frac{1}{100}=$ $\qquad$ 6. $\frac{6}{10}+\frac{5}{100}=$ $\qquad$ 7. $\frac{4}{100}+\frac{2}{10}=$ $\qquad$
8. $\frac{7}{100}+\frac{8}{10}=$ $\qquad$ 9. $\frac{4}{10}+\frac{22}{100}=$ $\qquad$ 10. $\frac{8}{10}+\frac{19}{100}=$ $\qquad$
$\qquad$
7
Mental Math!
a. Two adults and two children go to the movies. Tickets are $\$ 3.50$ for adults and half price for children. What is the total cost?
b. What would be the total cost for two adults and two children to go to the movies if the tickets were $\$ 7.00$ for adults and half price for children?
$\qquad$

## Try This

- Use Fraction Circle pieces to model each pizza story.
- Write an addition or subtraction number sentence for each story.
- Draw a picture of the sum or difference on the circle.

1. Mark ate $\frac{1}{4}$ of a cheese pizza. Karen ate $\frac{2}{4}$ of the same cheese pizza. How much pizza did
 they eat in all?
$\qquad$
2. Kevin ate $\frac{3}{8}$ of a sausage pizza. Then he ate $\frac{4}{8}$ of the same sausage pizza. How much pizza did he eat?

3. There was $\frac{7}{8}$ of a meat pizza on the buffet table. Bill ate $\frac{3}{8}$ of that pizza. How much of the meat pizza was left on the buffet table?
4. Tammy made a pepperoni pizza. She ate $\frac{4}{5}$ of the pizza. How much pizza was left?
$\qquad$
5. Ross had $\frac{3}{6}$ of a spinach pizza. He gave $\frac{2}{6}$ of it to Rita. How much pizza was left?

$\qquad$
6. Juan ate $\frac{3}{12}$ of a large black olive pizza. Donna ate $\frac{1}{12}$ of the same black olive pizza.
 How much pizza did they both eat?

## Challenge

Write a pizza story. Ask a friend to draw a picture about your story and write a number sentence for it.
$\qquad$
$\qquad$

Use Fraction Circles to model the problem. Fill in the number sentence.

1. Lorenzo ate $\frac{1}{4}$ of a cheese pizza. Ariel ate $\frac{1}{4}$ of the same pizza. How much of the pizza did they eat in all?
$\frac{1}{4}+\frac{1}{4}=$ $\qquad$ of the pizza


Use Fraction Circles to model the problem. Draw the model.
Fill in the number sentence.
2. Tommy ate $\frac{2}{5}$ of a mushroom pizza. How much of the pizza was left?
$\qquad$ - $\qquad$ $=$ $\qquad$ of the pizza

$=$


Write a number sentence and solve the problem.
3. Howard made a sausage pizza. He ate $\frac{2}{6}$ of the pizza. How much of the pizza was left?
$\qquad$
4. There was $\frac{4}{10}$ of a pizza left on the kitchen counter. Molly ate $\frac{2}{10}$ of that pizza. How much of the pizza was left on the kitchen counter?
5. Noah ate $\frac{5}{8}$ of a pepperoni pizza. Nathan ate $\frac{1}{8}$ of the same pizza. How much of the pizza did Noah and Nathan eat in all?

