Liquid Volume Hunt

Family Note Today your child used a set of benchmark beakers to estimate and measure liquid volume in liters (L) and milliliters (mL). Liquid volume is a measure of how much liquid a container can hold. Help your child look at labels to find containers of liquids that are measured in milliliters and liters. Have your child record the items in the table below.

Please send clean, empty, unbreakable containers to school for our next lesson.

Please return this Home Link to school tomorrow.

① Examine labels on items for liquid volume measured in liters or milliliters. Record your findings in the table below.

Item	Liquid Volume Units
flavored water bottle	*530 mL*

② Circle an item that you can use as a benchmark for 1 liter.

③ Put a star next to an item that you can use as a benchmark for 500 milliliters.

Try This

④ Estimate the liquid volume of a clean dinner plate: about _____ mL

If you have a measuring tool marked with milliliters, find the liquid volume of your dinner plate by measuring how much water it holds before spilling over the edges.

about _____ mL

On the back of this page, explain how you found the liquid volume of the dinner plate.

Exploring Equivalent Fractions

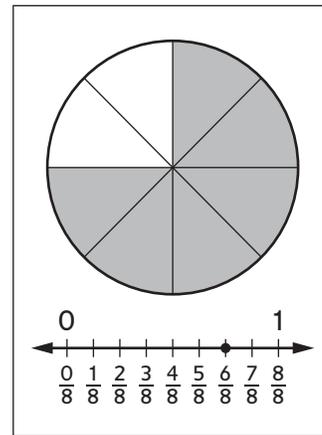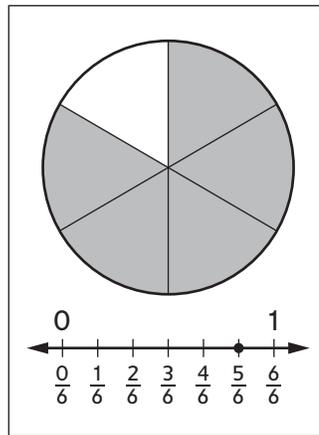> **Family Note** Today your child explored different representations of equal shares and played *Fraction Memory.* Help your child make sense of the *Fraction Memory* round below.
>
> ***Please return this Home Link to school tomorrow.***

(1) Nash chose these two cards in a round of *Fraction Memory:*

Nash says that these cards show equivalent fractions. Do you agree or disagree? Explain.

_____

_____

_____

Practice

Solve.

(2) $6 \times 9 =$ _____

(3) $9 \times 8 =$ _____

(4) _____ $= 7 \times 8$

Number Stories with Measures

Family Note Today your child solved number stories involving time, volume, mass, and length. Help your child make sense of the stories below. Problems 1 and 2 are similar to those we solved in class. For the Try This problem, you may wish to remind your child that 2 halves make 1 whole.

Please return this Home Link to school tomorrow.

Solve. Use drawings or number models to show your work.

SRB 30-31

1. The liquid volume of 1 juice box is about 150 mL.

   What is the liquid volume of 3 juice boxes?

   Answer: about _____
   (unit)

2. Art club ends at 3:30 P.M. Your mom arrives to pick you up at 3:10 P.M. If the teacher lets you out 5 minutes late, about how long does your mom have to wait?

   Answer: about _____
   (unit)

Try This

3. Anastasia's water bottle has a liquid volume of about 1 liter. She drinks about $1\frac{1}{2}$ bottles of water every day.

   About how many liters of water does Anastasia drink in 5 days? You may draw a picture.

   Answer: about _____
   (unit)

233

Fraction Strips

Family Note Today your child made a set of fraction strips. Fraction strips are equal-length strips folded into equal parts. Each equal part is labeled with the appropriate unit fraction, such as $\frac{1}{2}$ and $\frac{1}{4}$. The strips can be used to compare fractions.

Help your child shade rectangles to show each fraction and write fractions that match the shaded parts.

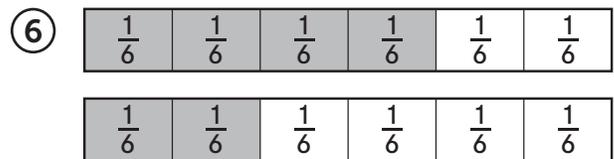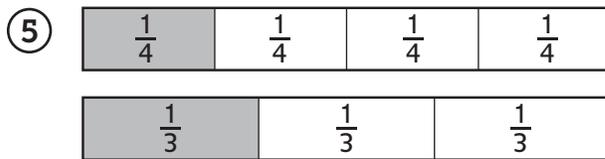***Please return this Home Link to school tomorrow.***

Shade each rectangle to match the fraction below it.

SRB
139

Example: $\frac{2}{4}$

① $\frac{2}{3}$ ② $\frac{3}{8}$ ③ $\frac{3}{6}$ ④ $\frac{1}{4}$
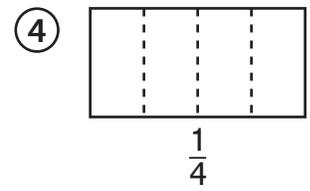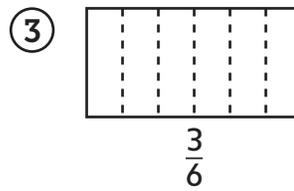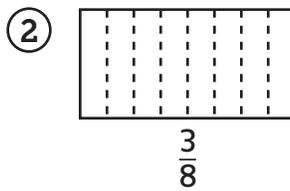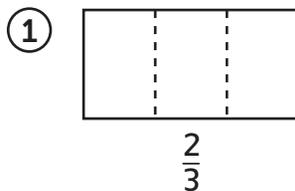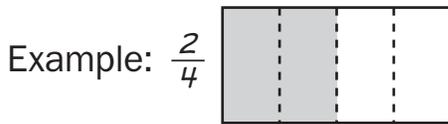
Compare the shaded parts of the fraction strips. Write >, <, or = to make the number sentence true.

< means *is less than*
> means *is greater than*
= means *is equal to*

⑤
| $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ |

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

$\frac{1}{4}$ ____ $\frac{1}{3}$

⑥
| $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ |

| $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ |

$\frac{4}{6}$ ____ $\frac{2}{6}$

Practice

Make an estimate. Then show how you solve each problem on the back of this page. Explain to someone how you can use your estimate to check whether your answer makes sense.

Unit

⑦ $963 - 548 =$ _____

My estimate: _____

⑧ $412 + 298 =$ _____

My estimate: _____

Fractions on Number Lines

**Family Note** Today your child learned about fractions as numbers on a number line. Children made their own Fraction Number-Line Posters by dividing number lines from 0 to 1 into equal-size parts, or *distances.* They labeled the tick marks with the appropriate fractions. Support your child in locating fractions on the number lines below.

Please return this Home Link to school tomorrow.

---

(1) Write the fraction that represents the distance the triangle moved.

SRB
140-141
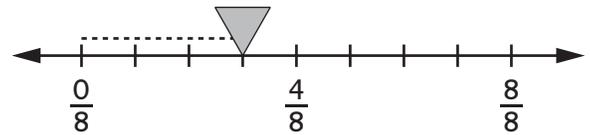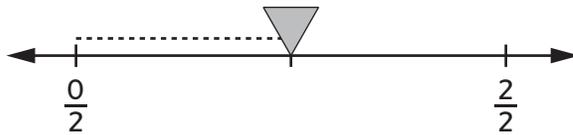
(2) Write the missing fractions.
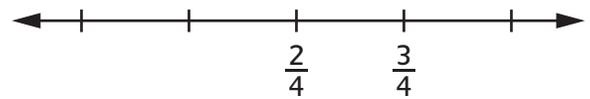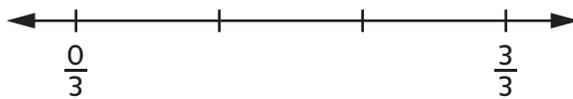
Practice

Fill in the unit. Solve. Show your work.

Unit

(3) $333 + 492 =$ _____

(4) _____ $= 888 - 678$

239

More Fractions on Number Lines

**Family Note** Today your child identified fractions that are less than or greater than 1 on number lines. Help your child count the number of equal parts or distances between 0 and 1 and label each tick mark with a fraction.
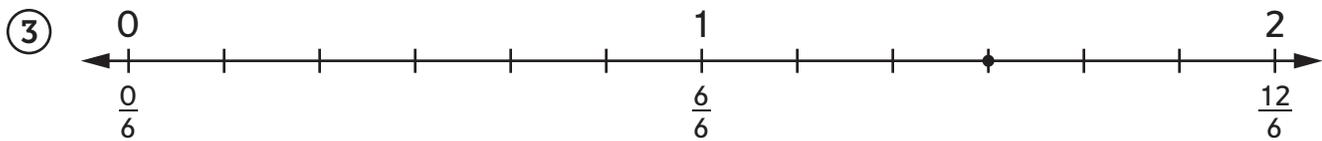
Please return this Home Link to school tomorrow.

For each number line, fill in the missing numbers. Then name the fraction at each point.

SRB
140-143

①

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

_____   _____

_____ names the point on the number line.

②

0 .... 1 2

$\frac{0}{3}$ $\frac{2}{3}$ $\overline{3}$ $\frac{4}{3}$ $\frac{6}{3}$

_____   _____

_____ names the point on the number line.

③

0 .... 1 2

$\frac{0}{6}$ $\frac{6}{6}$ $\frac{12}{6}$

____ ____ ____ ____ ____   ____ ____ ____ ____ ____
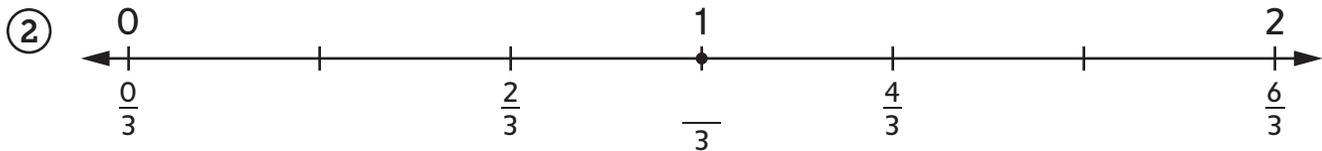
_____ names the point on the number line.

④ Look at the point on each number line. Which point names a fraction greater than 1? _____

Practice

Fill in the unit. Solve. Show your work on the back of this page.

⑤ $549 - 289 =$ _____

⑥ $739 + 261 =$ _____

| Unit |
|------|
| |

Comparing Fractions to $\frac{1}{2}$

Family Note Today your child wrote number sentences comparing fractions shown with fraction circles and number lines. Ask your child to explain whether the fractions represented below are greater than (>), less than (<), or equal to (=) $\frac{1}{2}$.

Please return this Home Link to school tomorrow.

Shade each circle to match the fraction below it.

SRB
155-156

Example:
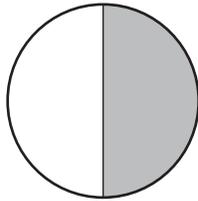
$\frac{1}{2}$

①

$\frac{2}{3}$

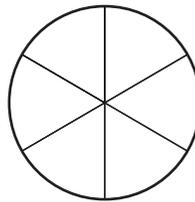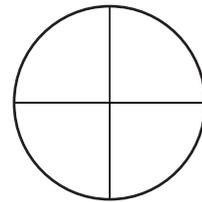②

$\frac{3}{6}$

③

$\frac{1}{4}$

Look at the shaded parts of the circles.

④ Write the fraction above that is less than $\frac{1}{2}$.

_____

⑤ Write the fraction above that is equal to $\frac{1}{2}$.

_____

⑥ Write the fraction above that is greater than $\frac{1}{2}$.

_____

⑦ Write <, >, or = to make the sentence true.
You may draw a picture to help.

$\frac{3}{4}$ _____ $\frac{1}{4}$

Sorting Fractions

SRB
155

(1) Look at the fractions below and sort them into two groups: fractions less than 1 and fractions greater than 1.
Use the number lines on the following page to help you.

$\frac{1}{2}, \frac{2}{3}, \frac{6}{4}, \frac{3}{2}, \frac{7}{8}, \frac{5}{3}, \frac{6}{8}, \frac{7}{6}$

Less Than 1	Greater Than 1

(2) Look for a pattern in the fractions you sorted. Describe a pattern that can help you decide whether a fraction is less than 1 or greater than 1.

Sorting Fractions
(continued)
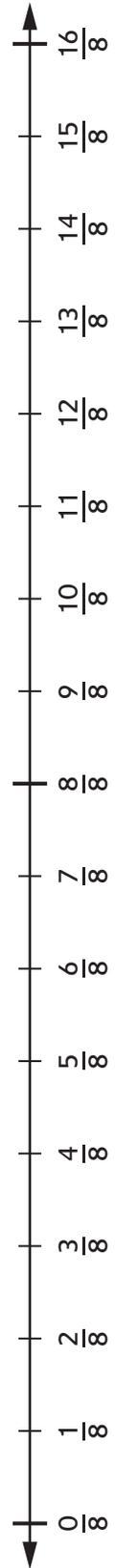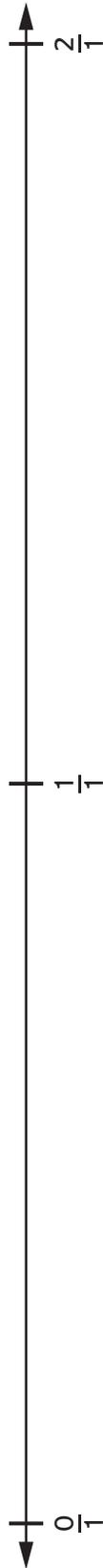
Fraction Number Lines

2	$\frac{2}{1}$	$\frac{4}{2}$	$\frac{6}{3}$	$\frac{8}{4}$	$\frac{12}{6}$	$\frac{16}{8}$
						$\frac{15}{8}$
				$\frac{7}{4}$	$\frac{11}{6}$	$\frac{14}{8}$
			$\frac{5}{3}$		$\frac{10}{6}$	$\frac{13}{8}$
		$\frac{3}{2}$		$\frac{6}{4}$	$\frac{9}{6}$	$\frac{12}{8}$
						$\frac{11}{8}$
			$\frac{4}{3}$		$\frac{8}{6}$	$\frac{10}{8}$
				$\frac{5}{4}$		
					$\frac{7}{6}$	$\frac{9}{8}$
1	$\frac{1}{1}$	$\frac{2}{2}$	$\frac{3}{3}$	$\frac{4}{4}$	$\frac{6}{6}$	$\frac{8}{8}$
					$\frac{5}{6}$	$\frac{7}{8}$
				$\frac{3}{4}$		$\frac{6}{8}$
			$\frac{2}{3}$		$\frac{4}{6}$	$\frac{5}{8}$
	$\frac{1}{2}$			$\frac{2}{4}$	$\frac{3}{6}$	$\frac{4}{8}$
						$\frac{3}{8}$
			$\frac{1}{3}$		$\frac{2}{6}$	$\frac{2}{8}$
				$\frac{1}{4}$		
					$\frac{1}{6}$	$\frac{1}{8}$
0	$\frac{0}{1}$	$\frac{0}{2}$	$\frac{0}{3}$	$\frac{0}{4}$	$\frac{0}{6}$	$\frac{0}{8}$

Locating Fractions on Number Lines

Family Note Today your child learned to partition, or divide, number lines into equal parts and then locate and label fractions between whole numbers. The denominator of the given fraction describes the number and size of the equal parts. A whole on each number line below is equal to the distance between 0 and 1.

Please return this Home Link to school tomorrow.

Partition the wholes on each number line. Then locate and label the given fractions. Tell someone at home how you partitioned your number lines.

SRB
144-145

① $\frac{1}{2}$

```
←─┼──────────────────────────────────────────┼─→
  0                                            1
```

② $\frac{1}{4}$

```
←─┼──────────────────────────────────────────┼─→
  0                                            1
```

③ $\frac{2}{3}$

```
←─┼──────────────────────────────────────────┼─→
  0                                            1
```

④ $\frac{5}{6}$

```
←─┼──────────────────────────────────────────┼─→
  0                                            1
```

Try This

⑤ $\frac{3}{2}$

```
←─┼──────────────────────────────────────────┼─→
  $\frac{0}{2}$                              $\frac{4}{2}$
```
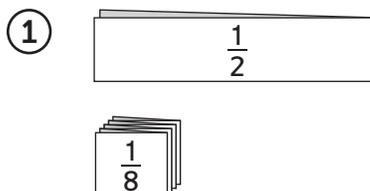
Matching Fraction Tools

Family Note Your child has been using number lines, fraction circles, and fraction strips to learn about and represent fractions. Today your child used these tools to make and justify fraction comparisons. Encourage your child to explain how he or she matched each number sentence with a picture that represents the fraction comparison.

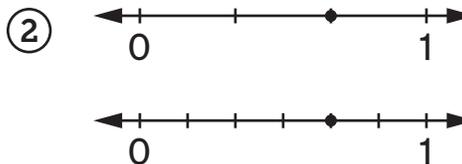*Please return this Home Link to school tomorrow.*

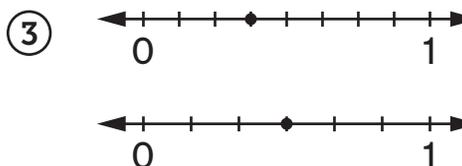Draw a line from each number sentence to the picture that represents it.
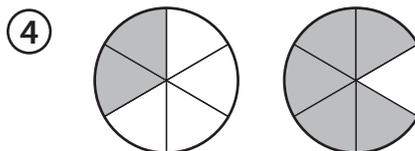
$\frac{1}{2} > \frac{1}{8}$

①

$\frac{1}{2}$

$\frac{1}{8}$

$\frac{2}{6} < \frac{5}{6}$

②

0   1

0   1

$\frac{2}{3} = \frac{4}{6}$

③

0   1

0   1

$\frac{3}{8} < \frac{3}{6}$

④

On the back of this page, write one of the above fraction number sentences. Sketch a different fraction tool that shows the same comparison.

259

Fraction Number Stories

Family Note Today your child solved fraction number stories using a variety of fraction models, including pictures. Encourage your child to sketch a picture to represent each story.

Please return this Home Link to school tomorrow.

Solve these number stories. Show your answer as a fraction.
You may draw pictures to show your work.

① Ralph read $\frac{1}{8}$ of his book. What fraction of the book does he still have left to read?

My sketch:

_____ of his book

② Four friends equally share two bottles of juice. How much juice will each friend get?

My sketch:

_____ of a bottle of juice

③ Nora rode her bike $\frac{2}{2}$ of a block. Brady rode his bike $\frac{4}{4}$ of the same block. Compare the distances each child rode. What do you notice? Explain your answer.

My sketch:

Fractions of Collections

> **Family Note** Today your child used fractions to name parts of collections of objects. As you help your child, encourage him or her to use sketches, pennies, or other tools to solve the number stories.
>
> ***Please return this Home Link to school tomorrow.***

Solve. Explain to someone at home how you figured out the numerator and the denominator for each fraction in Problems 1–3.

SRB 146-147

(1) 12 dogs are in the park. 2 of them are chasing a ball.

What fraction of the dogs are chasing a ball? _____

(2) 7 children are waiting for the school bus. 4 of them are girls.

What fraction of the children are girls? _____

(3) There are 16 tulips in the garden. 4 of them are red.

What fraction of the tulips are not red? _____

(4) Lisa and Carlie each have 6 cups. $\frac{2}{6}$ of Lisa's cups are yellow. $\frac{4}{6}$ of Carlie's cups are yellow. Who has more yellow cups? Draw a picture to show your thinking.

_____ has more yellow cups.

Practice

Fill in the unit. Solve. Show your work on the back of this page.

Unit

(5) $476 = 741 -$ _____

(6) $558 =$ _____ $- 328$