

Name _____

Numbers to Ten Thousand

Complete the packing chart. Use the fewest packages possible.
When there is a zero, use the next smaller size package.

	Number of Blocks Ordered	Crates (Ten Thousands)	Boxes (Thousands)	Cases (Hundreds)	Stacks (Tens)	Single Blocks (Ones)
1.	1,492	0	1	4	9	2
2.	3,016				1	
3.	2,804					
4.	4,675					
5.	1,727	0	0		2	7
6.	2,351		0		0	
7.	5,008		0		0	
8.	4,976		0		0	

Problem Solving 

9. A worker at the block factory packed blocks in 3 boxes of 1,000, 4 cases of 100, and 9 single blocks. How many blocks did the worker pack?

10. Matt needs to pack an order for 1,816 blocks. How can Matt pack the blocks without using boxes of 1,000?

Name _____

Read and Write Numbers to Ten Thousands

Write the number in standard form.

- $2,000 + 600 + 30 + 5$ 2,635
- five thousand, three hundred sixty _____
- $8,000 + 800 + 90 + 9$ _____
- one thousand, fifty-one _____
- three thousand, six hundred nine _____

Write the value of the underlined digit two ways.

6. 5,8967. 4,492

8. 1,3509. 3,413

10. Rename 4,180 as hundreds and tens.

_____ hundreds _____ tens

11. Rename 7,168 as tens and ones.

_____ tens ____ ones

Problem Solving

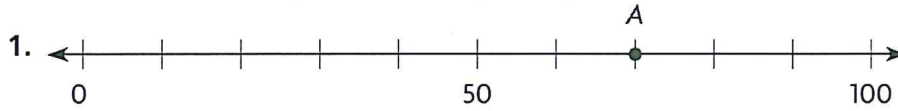
12. The population of a town is 4,951 people. What is the value of the digit 4 in the number?

13. The number of tourists who visited a national park in one day was nine thousand, four hundred twelve. Write this number in two other ways.

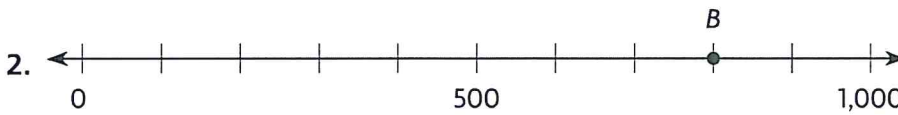
Name _____

Relative Size on a Number Line

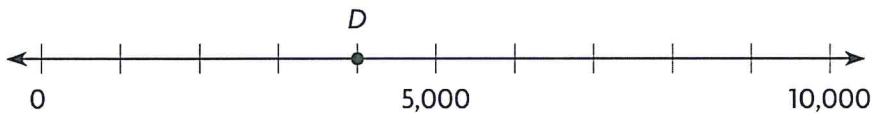
Find the number represented by the point.



7 tens is 70

70**Problem Solving** 

For 3–4, use the number line below.

Colin and Sophia score points in a game.
They show their score on a number line.

3. Colin's score is shown by point *D* on the number line.
How many points has he scored?

4. Sophia scored 3,000 points more than Colin.
Draw a point on the number line to show Sophia's
score. What is her score?

Name _____

Compare 3- and 4-Digit NumbersCompare the numbers. Write $<$, $>$, or $=$ in the \bigcirc .

- | | |
|----------------------------|----------------------------|
| 1. 576 \bigcirc 567 | 2. 9,876 \bigcirc 9,886 |
| 3. 490 \bigcirc 409 | 4. 7,245 \bigcirc 7,245 |
| 5. 2,145 \bigcirc 2,245 | 6. 9,304 \bigcirc 9,034 |
| 7. 8,691 \bigcirc 8,691 | 8. 245 \bigcirc 254 |
| 9. 1,807 \bigcirc 807 | 10. 5,247 \bigcirc 5,247 |
| 11. 3,485 \bigcirc 3,548 | 12. 1,953 \bigcirc 9,351 |
| 13. 6,310 \bigcirc 6,310 | 14. 589 \bigcirc 5,890 |
| 15. 760 \bigcirc 1,760 | 16. 5,123 \bigcirc 5,321 |
| 17. 7,645 \bigcirc 7,546 | 18. 5,612 \bigcirc 5,622 |

Problem Solving 

19. On Saturday, 4,567 people saw the new animal movie. On Sunday, 4,078 people saw the movie. Use $<$, $>$, or $=$ to compare the number of people who saw the movie on the two days.

20. Captain Fry flies 1,764 miles. Captain Hale flies 764 miles. Who flies more miles?

21. Adam says he is 1,352 millimeters tall. Bobby says that he is 1,452 millimeters tall. Who is shorter?

Name _____

Multiply with 11 and 12

Find the product.

1. **99** = 9×11

Think: $9 \times 10 = 90$ and

$9 \times 1 = 9$

So, $9 \times 11 = 90 + 9 = 99$.

2. $12 \times 9 =$ _____

3. _____ = 1×11

4. $2 \times 11 =$ _____

5. _____ = 12×0

6. _____ = 5×11

7. _____ = 7×12

8. $4 \times 11 =$ _____

9. _____ = 12×4

10. $8 \times 11 =$ _____

11. _____ = 3×12

12. _____ = 9×12

Problem Solving 

Use the table for 13–14.

13. Mr. Wang buys 6 packs of pencils. How many pencils does Mr. Wang buy?

14. Mr. Wang buys 12 packs of pens and 11 packs of erasers. Does Mr. Wang buy more pens or erasers?
- Explain.**

Supplies	
Item	Number in Each Pack
Pencils	12
Pens	8
Erasers	9

Name _____

Divide with 11 and 12

Find the unknown factor and quotient.

$$1. \quad 11 \times \blacksquare = 88 \quad 88 \div 11 = \blacksquare$$

$$\blacksquare = \underline{8} \quad \blacksquare = \underline{8}$$

$$2. \quad 11 \times \blacksquare = 55 \quad 55 \div 11 = \blacksquare$$

$$\blacksquare = \underline{\quad} \quad \blacksquare = \underline{\quad}$$

$$3. \quad 12 \times p = 36 \quad 36 \div 12 = p$$

$$p = \underline{\quad} \quad p = \underline{\quad}$$

$$4. \quad 12 \times g = 84 \quad 84 \div 12 = g$$

$$g = \underline{\quad} \quad g = \underline{\quad}$$

Find the quotient.

5. $\underline{\quad} = 96 \div 8$

6. $44 \div 4 = \underline{\quad}$

7. $\underline{\quad} = 60 \div 5$

8. $55 \div 5 = \underline{\quad}$

9. $\underline{\quad} = 66 \div 6$

10. $\underline{\quad} = 48 \div 4$

11. $72 \div 6 = \underline{\quad}$

12. $88 \div 8 = \underline{\quad}$

13. $\underline{\quad} = 108 \div 9$

14. $\underline{\quad} = 12 \div 1$

15. $\underline{\quad} = 24 \div 2$

16. $33 \div 3 = \underline{\quad}$

Compare. Write $<$, $>$, or $=$ for each \bigcirc .

17. $60 \div 12 \bigcirc 55 \div 11$

18. $22 \div 2 \bigcirc 48 \div 4$

19. $96 \div 8 \bigcirc 84 \div 12$

Problem Solving 

20. Mrs. Green bought 72 pencils for her class. There were 12 pencils in each box. How many boxes of pencils did Mrs. Green buy?

21. Henry baked 33 cookies. He put the same number of cookies in each of 11 bags. How many cookies did he put in each bag?

Name _____

Multiplication and Division Relationships

Complete the related multiplication and division equations.

1. $4 \times 12 = \underline{48}$

$\underline{12} \times 4 = 48$

$48 \div \underline{4} = 12$

$\underline{48} \div 12 = 4$

2. $5 \times \underline{\quad} = 55$

$11 \times 5 = \underline{\quad}$

$\underline{\quad} \div 5 = 11$

$55 \div \underline{\quad} = 5$

3. $\underline{\quad} \times 12 = 72$

$\underline{\quad} \times 6 = 72$

$72 \div \underline{\quad} = 12$

$\underline{\quad} \div 12 = 6$

4. $\underline{\quad} \times 11 = 88$

$\underline{\quad} \times 8 = 88$

$\underline{\quad} \div 8 = 11$

$88 \div \underline{\quad} = 8$

5. $3 \times \underline{\quad} = 36$

$12 \times \underline{\quad} = 36$

$36 \div 3 = \underline{\quad}$

$36 \div 12 = \underline{\quad}$

6. $4 \times 11 = \underline{\quad}$

$11 \times \underline{\quad} = 44$

$44 \div \underline{\quad} = 11$

$44 \div 11 = \underline{\quad}$

7. $8 \times 12 = \underline{\quad}$

$\underline{\quad} \times 8 = 96$

$96 \div \underline{\quad} = 12$

$\underline{\quad} \div 12 = 8$

8. $\underline{\quad} \times 11 = 22$

$11 \times 2 = \underline{\quad}$

$22 \div \underline{\quad} = 11$

$22 \div 11 = \underline{\quad}$

9. $1 \times \underline{\quad} = 12$

$\underline{\quad} \times 1 = 12$

$\underline{\quad} \div 1 = 12$

$12 \div \underline{\quad} = 1$

Problem Solving 

10. Lisa put 66 flowers in vases. She put the same number of flowers in each of 6 vases. How many flowers did Lisa put in each vase?

11. Lisa used 84 flowers to make bouquets. She used 7 flowers in each bouquet. How many bouquets did Lisa make?

Name _____

Use Multiplication Patterns

Use a basic fact and a pattern to find the products.

1. $3 \times 10 = \underline{30}$ 2. $10 \times 2 = \underline{\hspace{2cm}}$ 3. $8 \times 10 = \underline{\hspace{2cm}}$
 $3 \times 100 = \underline{300}$ $100 \times 2 = \underline{\hspace{2cm}}$ $8 \times 100 = \underline{\hspace{2cm}}$
 $3 \times 1,000 = \underline{3,000}$ $1,000 \times 2 = \underline{\hspace{2cm}}$ $8 \times 1,000 = \underline{\hspace{2cm}}$
4. $10 \times 6 = \underline{\hspace{2cm}}$ 5. $5 \times 10 = \underline{\hspace{2cm}}$ 6. $10 \times 7 = \underline{\hspace{2cm}}$
 $100 \times 6 = \underline{\hspace{2cm}}$ $5 \times 100 = \underline{\hspace{2cm}}$ $100 \times 7 = \underline{\hspace{2cm}}$
 $1,000 \times 6 = \underline{\hspace{2cm}}$ $5 \times 1,000 = \underline{\hspace{2cm}}$ $1,000 \times 7 = \underline{\hspace{2cm}}$

Find the product.



7. $10 \times 3 = \underline{\hspace{2cm}}$ 8. $9 \times 100 = \underline{\hspace{2cm}}$ 9. $\underline{\hspace{2cm}} = 6 \times 100$
10. $1,000 \times 9 = \underline{\hspace{2cm}}$ 11. $\underline{\hspace{2cm}} = 5 \times 10$ 12. $4 \times 100 = \underline{\hspace{2cm}}$
13. $\underline{\hspace{2cm}} = 2 \times 10$ 14. $\underline{\hspace{2cm}} = 1,000 \times 1$ 15. $7 \times 1,000 = \underline{\hspace{2cm}}$


Problem Solving 

Use the picture graph for 16–17.

16. How many rocks does Eva have?
- Explain**
- how you found your answer.

17. Sam has 30 more rocks in his collection than Tim. Draw rocks in the picture graph to show the number of rocks in Sam's collection.
- Explain**
- your answer.

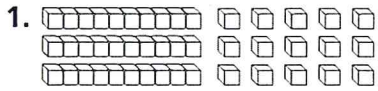
Rock Collections	
Name	Number of Rocks
Eva	
Tim	
Sam	

Key: Each  = 10 rocks.

Name _____

Use Models to Multiply Tens and Ones

Find the product. Show your multiplication and addition.

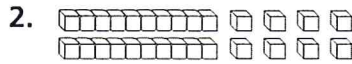


$3 \times 15 = \blacksquare$

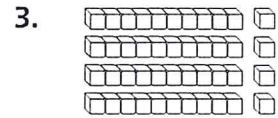
$3 \times 10 = 30$

$3 \times 5 = 15$

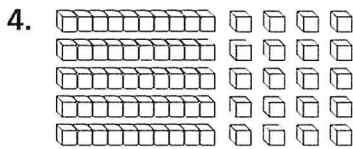
$30 + 15 = 45$



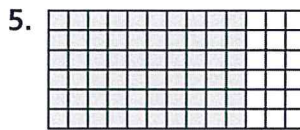
$2 \times 14 = \blacksquare$



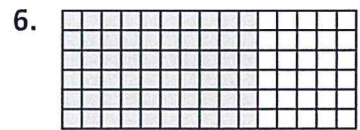
$4 \times 11 = \blacksquare$



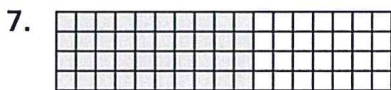
$5 \times 14 = \blacksquare$



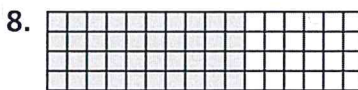
$6 \times 13 = \blacksquare$



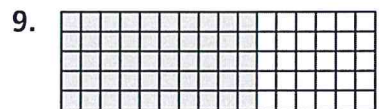
$6 \times 15 = \blacksquare$



$4 \times 17 = \blacksquare$



$4 \times 16 = \blacksquare$



$5 \times 16 = \blacksquare$

Problem Solving **REAL WORLD**

10. Mia babysits for \$4 an hour. How much money does she earn if she works for 12 hours?

Name _____

Model Division with Remainders

Complete.

1. Divide 15 hats into 4 equal groups.

There are 3 hats in each group and 3 hats left over.

3. Divide 29 cookies into groups of 3.

There are _____ groups and _____ cookies left over.

2. Divide 50 forks into 6 equal groups.

There are _____ forks in each group and _____ forks left over.

4. Divide 46 paper cups into groups of 5.

There are _____ groups and _____ paper cup left over.

Find the total number of objects.

5. There are 8 books in each of 3 groups and 4 books left over.

There are _____ books in all.

6. There are 7 muffins in each of 5 groups and 1 muffin left over.

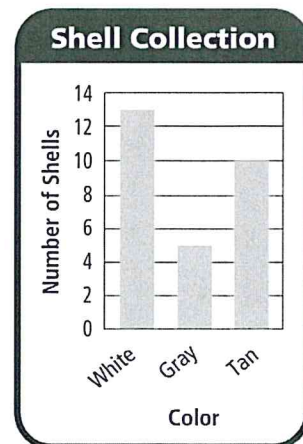
There are _____ muffins in all.

Problem Solving 

Use the bar graph for 7–8.

7. If Sarah divides the white shells evenly onto 2 shelves, how many shells will be on each shelf? How many shells will be left over?

8. If Sarah puts an equal number of tan shells into some boxes and has 1 shell left over, how many boxes will she use? How many shells will be in each box?

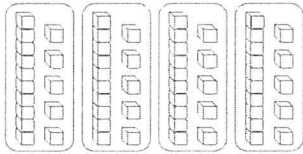


Name _____

Use Models to Divide Tens and Ones

Use base-ten blocks and your MathBoard to divide.

1. $60 \div 4 = \underline{15}$



2. $65 \div 5 = \underline{\quad}$

3. $54 \div 3 = \underline{\quad}$

4. $90 \div 5 = \underline{\quad}$

5. $74 \div 2 = \underline{\quad}$

6. $98 \div 7 = \underline{\quad}$

7. $75 \div 5 = \underline{\quad}$

8. $60 \div 3 = \underline{\quad}$

9. $78 \div 6 = \underline{\quad}$

10. $84 \div 4 = \underline{\quad}$

11. $96 \div 6 = \underline{\quad}$

12. $95 \div 5 = \underline{\quad}$

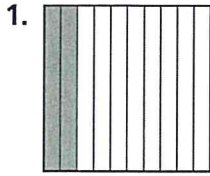
Problem Solving 

13. The third-grade students collected 90 cans of food for a food drive. They want to put an equal number of cans into each of 6 boxes. How many cans will they put into each box?

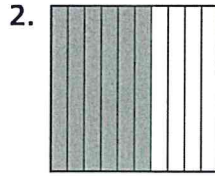
Name _____

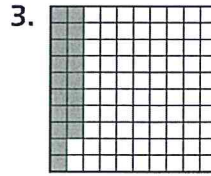
Model Tenths and Hundredths

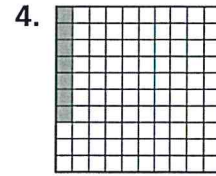
Write the fraction that names the shaded part.

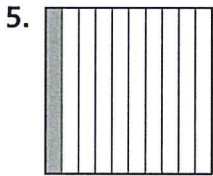


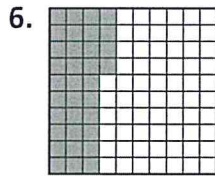
$\frac{2}{10}$

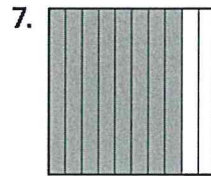


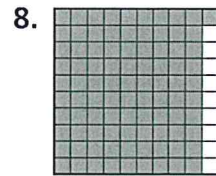












Problem Solving



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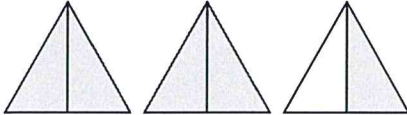
9. Pedro spins the pointer of a spinner 10 times. The pointer lands on the color blue 7 times. Write a fraction to represent the part of Pedro's spins that were blue.

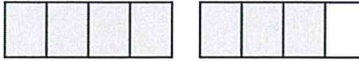
10. Anya asks 100 students if they walk to school. Of the students, $\frac{83}{100}$ say they walk to school. How many students walk to school?

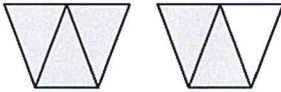
Name _____

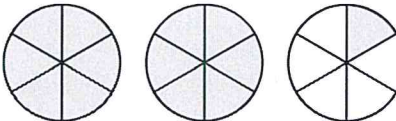
Fractions Greater Than One

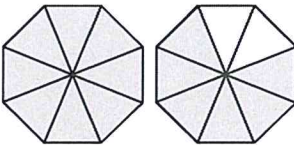
Each shape is 1 whole. Write a mixed number for the parts that are shaded.

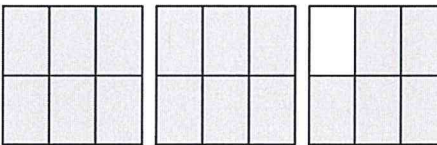
1. 
 $2\frac{1}{2}$

2. 

3. 

4. 

5. 

6. 

Problem Solving

7. Rachel and her friends eat $\frac{5}{4}$ pizzas. How can you write the amount of pizza they ate as a mixed number?

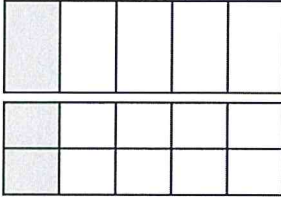
8. Ms. Fuller has $\frac{8}{3}$ pies left over from her party. How can you write the number of pies she has left over as a mixed number?

Name _____

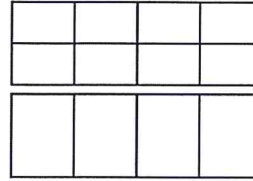
Equivalent Fractions

Use models to find the equivalent fraction.

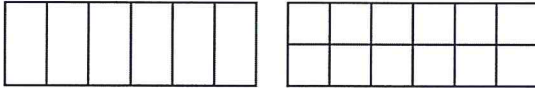
1. $\frac{1}{5} = \frac{2}{10}$



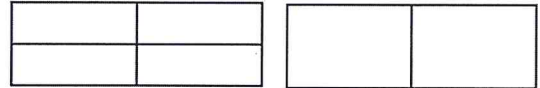
2. $\frac{2}{8} = \frac{1}{4}$



3. $\frac{1}{6} = \frac{2}{12}$



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



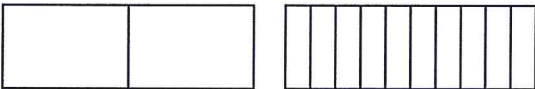
5. $\frac{1}{3} = \frac{4}{12}$



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



7. $\frac{1}{2} = \frac{5}{10}$



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



Problem Solving

9. Jamie uses $\frac{1}{3}$ of a package of juice boxes. There were 6 juice boxes in the package to start with. Write the fraction of the package Jamie used in sixths.

10. Luis colors $\frac{1}{4}$ of a spinner using a red crayon. Write the fraction of the spinner Luis colored red in twelfths.

Name _____

Equivalent Fractions on a Multiplication Table

Use a multiplication table to find three equivalent fractions.

1. $\frac{1}{2}$

2. $\frac{1}{5}$

$$\frac{2}{4}, \frac{3}{6}, \frac{4}{8}$$

3. $\frac{1}{10}$

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

5. $\frac{2}{8}$

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

7. $\frac{3}{10}$

8. $\frac{5}{6}$

Problem Solving

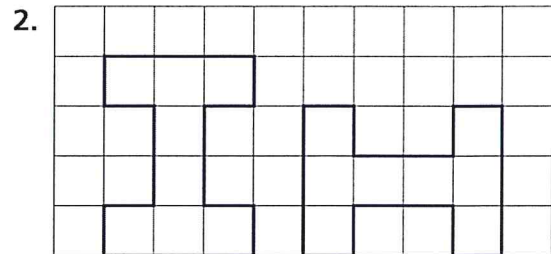
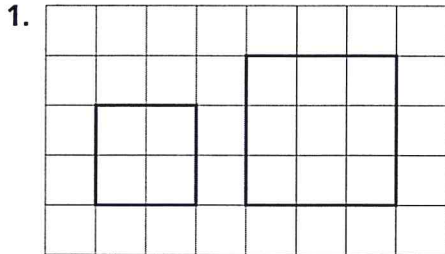
9. Nicki eats $\frac{1}{4}$ of a cereal bar. What are three equivalent fractions that name the part of the cereal bar that Nicki eats?

10. In a crate of apples, $\frac{3}{5}$ of the apples are green apples. What are three equivalent fractions that name the part of the apples in the crate that are green?

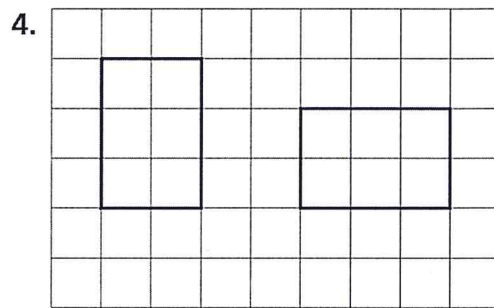
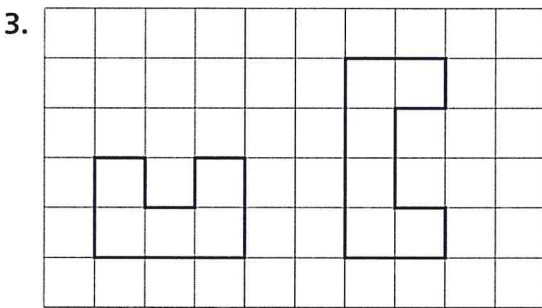
Name _____

Same Size, Same Shape

Look at the first shape. Tell if it appears to have the same size and shape as the second shape. Write *yes* or *no*.

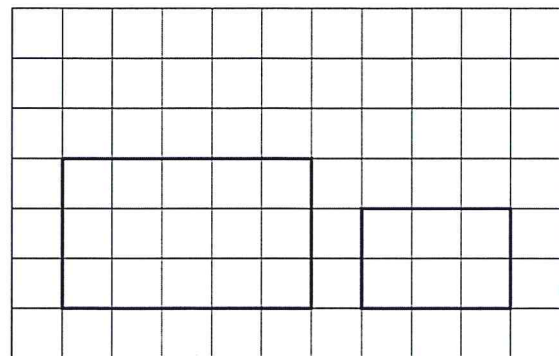


no



Problem Solving

5. Juanita draws the rectangles shown. Do the rectangles have the same size and are they shaped the same? Explain.

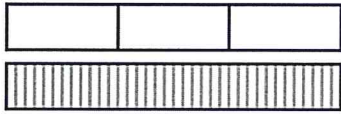


Name _____

Change Customary Units of Length

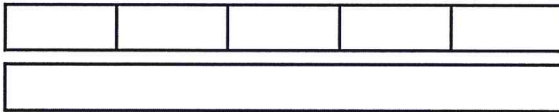
Draw a picture.

1. Rename 3 feet using inches.



3 feet = 36 inches

2. Rename 5 feet using inches.



5 feet = _____ inches

3. Draw a number line. Rename 8 feet using inches.

8 feet = _____ inches

4. Use the number line. Rename 9 feet using inches.



9 feet = _____ inches

Problem Solving 

5. Robbie has a piece of rope that is 6 feet long. How many inches long is the rope?
6. A fence is 4 feet tall. How many inches tall is the fence?

Name _____

Change Units for Length

Complete the table.

1.

Meters	1	2	3	4	5
Centimeters	100	200	300	400	500

Think: To find the number of centimeters, add 100 centimeters for each meter.

2.

Meters	6	7		9	
Centimeters	600	700	800		

Find the unknown number.

- | | |
|----------------------------------|-----------------------------------|
| 3. 1 meter = _____ centimeters | 4. 5 meters = _____ centimeters |
| 5. 4 meters = _____ centimeters | 6. 8 meters = _____ centimeters |
| 7. 3 meters = _____ centimeters | 8. 7 meters = _____ centimeters |
| 9. 2 meters = _____ centimeters | 10. 6 meters = _____ centimeters |
| 11. 9 meters = _____ centimeters | 12. 10 meters = _____ centimeters |

Problem Solving 

13. Ben paints 5 meters of fence before stopping for lunch. Then he paints 3 more meters of fence. How many centimeters of fence does Ben paint in all?
14. Dana needs 6 meters of ribbon to make bows. She has 160 centimeters of ribbon. Does Dana have enough ribbon to make the bows? **Explain.**

Name _____

Estimate and Measure Liquid Volume

Choose the unit you would use to measure the amount of liquid the container will hold. Choose the better unit of measure.

1. a bath tub: 40 cups or 40 gallons
2. a drinking mug: 1 cup or 1 quart
3. a soup bowl: 2 cups or 2 quarts
4. a water bucket: 1 cup or 1 gallon

Problem Solving 

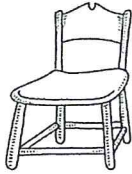
5. Jay made 4 quarts of fruit juice. How many cups of fruit juice did he make?
6. Vanessa will pour 2 gallons of milk into cups. How many cups will she fill?

Name _____

Estimate and Measure Weight

Choose the unit you would use to measure the weight.
Write *ounce* or *pound*.

1.



pound

2.



3.



4.



5.



6.



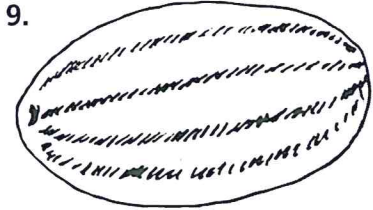
7.



8.



9.



Problem Solving **REAL WORLD**

10. Scott picks some apples to use for a batch of applesauce. Which is a more likely weight for the apples he picks, 5 ounces or 5 pounds?

11. Ms. Mott measures some sugar to make muffins. Does the sugar weigh 4 ounces or 4 pounds?
