

A STORY OF UNITS

# **Mathematics Curriculum**



## Grade K • MODULE 3

Comparison of Length, Weight, Capacity, and Numbers to 10

# **PROBLEM SETS**

Video tutorials: http://embarc.online

Version 3

## **Mathematics Curriculum**

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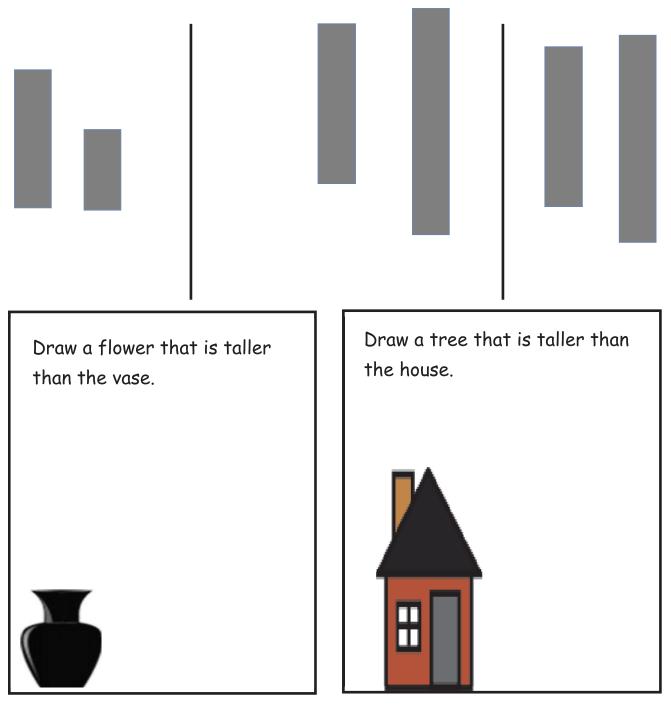
Comparison of Length, Weight, Capacity, and Numbers to 10

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Name \_\_\_\_\_ Date \_\_\_\_\_

For each pair, circle the longer one. Imagine the paper strips are lying flat on a table.

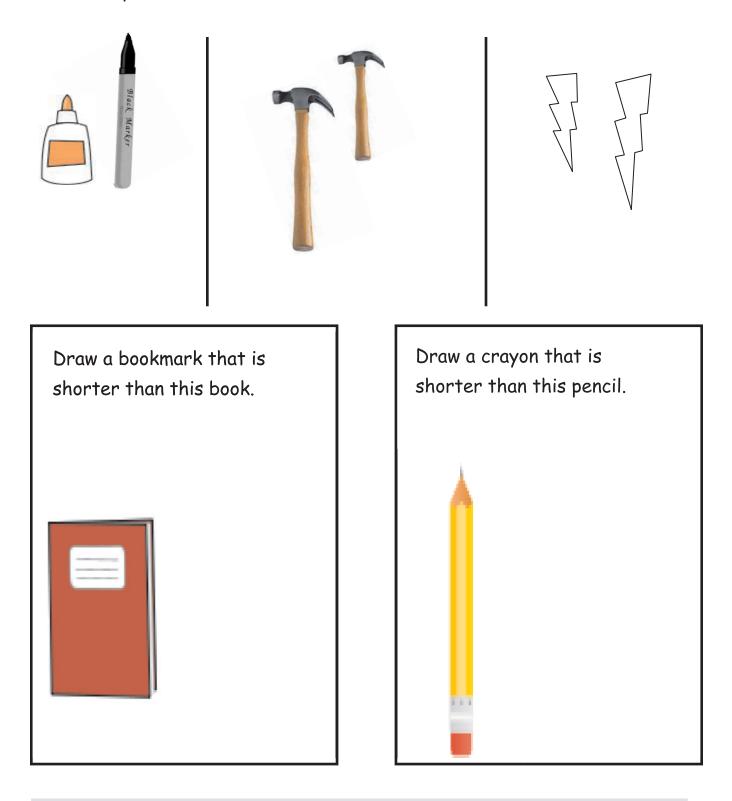




Lesson 1:

Compare lengths using *taller than* and *shorter than* with aligned and non-aligned endpoints.

For each pair, circle the shorter one.



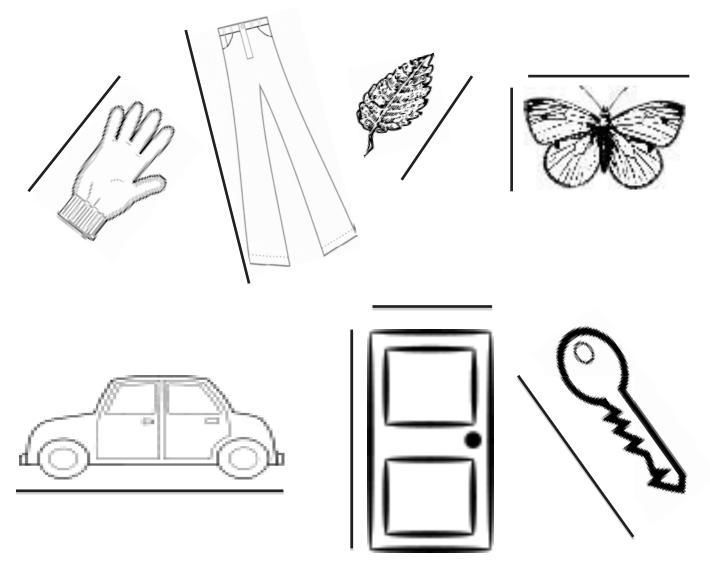


Lesson 1:

Compare lengths using *taller than* and *shorter than* with aligned and non-aligned endpoints.

Name

Cut out the picture of the string at the bottom of the page. Compare the string with each object to see which is longer. Use the line next to each object to help you compare. Color objects shorter than the string green. Color objects longer than the string orange.



On the back of your paper, draw something longer than, shorter than, and the same length as the picture of the string on the back of your paper. Color objects shorter than the string green. Color objects longer than the string orange.





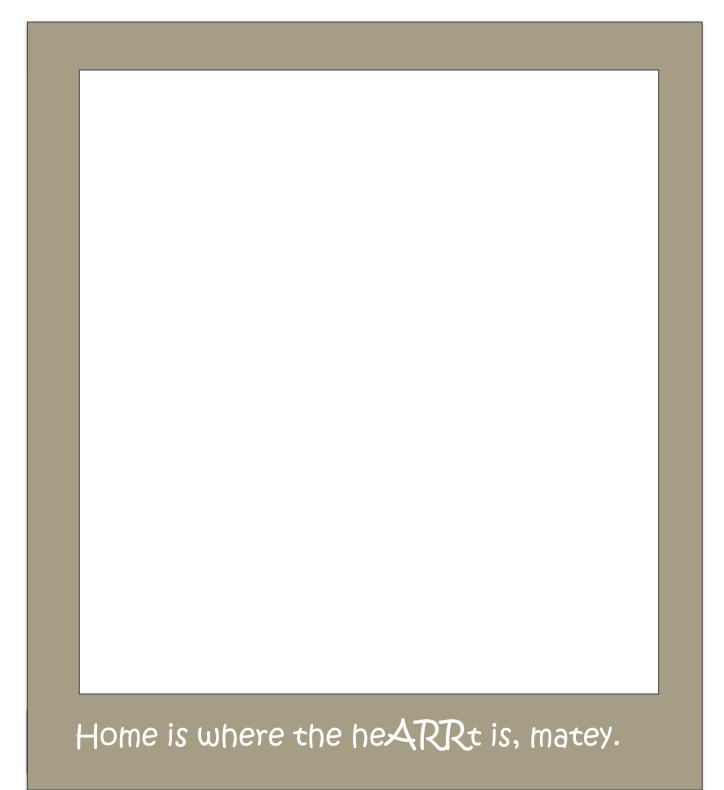


#### Longer or Shorter Recording Sheet

These objects are <b>longer</b> <b>than</b> my string.	These objects are <b>shorter than</b> my string.

longer or shorter







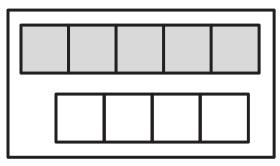
Lesson 3:

Make a series of longer than and shorter than comparisons.

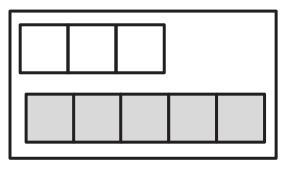
Name \_\_\_\_\_

Date
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Circle the shorter stick.

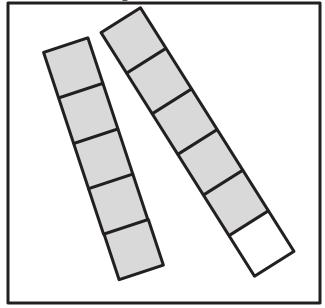


How many linking cubes are in the shorter stick? Write the number in the box.

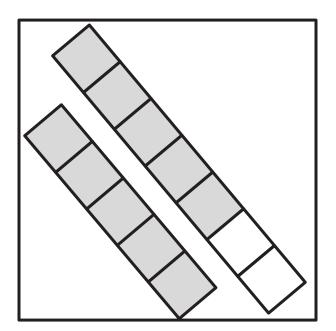


How many linking cubes are in the shorter stick? Write the number in the box.

Circle the longer stick



How many linking cubes are in the longer stick? Write the number in the box.



How many linking cubes are in the longer stick? Write the number in the box.



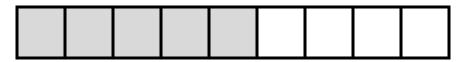
Draw a stick shorter than my 5-stick.



Draw a stick longer than mine.

		1

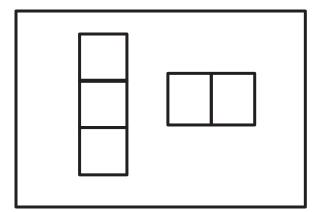
Draw a stick shorter than mine.

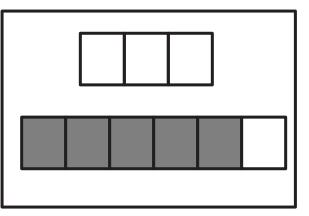




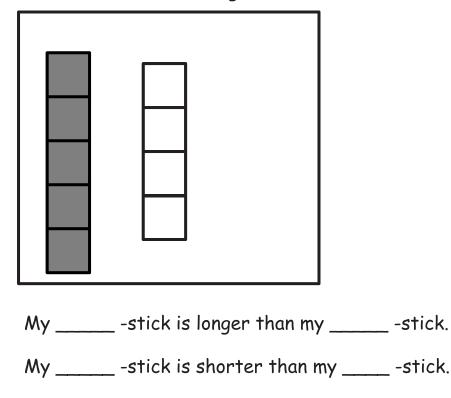
Name \_\_\_\_\_

Circle the stick that is shorter than the other.





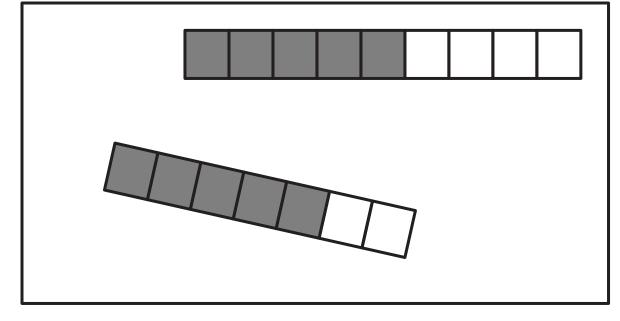
Circle the stick that is longer than the other.





Determine which linking cube stick is *longer than* or *shorter than* the other.





Circle the stick that is shorter than the other stick.

My \_\_\_\_\_ -stick is longer than my \_\_\_\_\_ -stick.

My \_\_\_\_\_ -stick is shorter than my \_\_\_\_\_ -stick.

On the back of your paper, draw a 6-stick.

Draw a stick longer than your 6-stick.

Draw a stick shorter than your 6-stick.

OR

On the back of your paper, draw a 9-stick.

Draw a stick longer than your 9-stick.

Draw a stick shorter than your 9-stick.

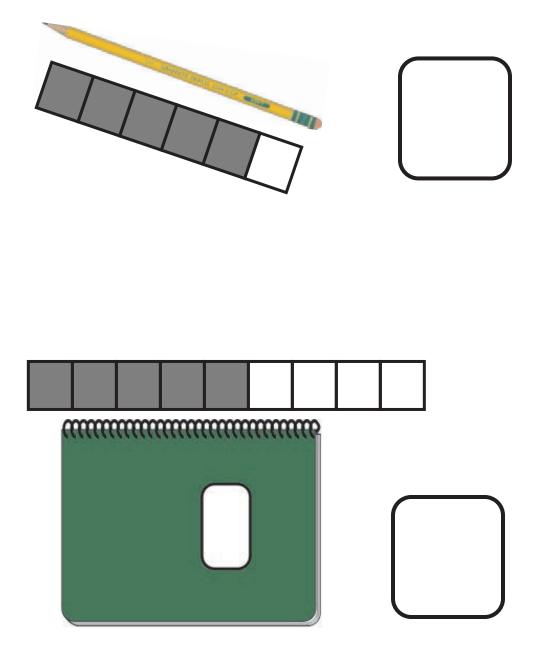




Name \_\_\_\_\_

Date \_\_\_\_\_

In the box, write the number of cubes there are in the pictured stick. Draw a green circle around the stick if it is longer than the object. Draw a blue circle around the stick if it is shorter than the object.





Lesson 6:

Compare the length of linking cube sticks to various objects.

Make a 3-stick. In your classroom, select a crayon, and see if your crayon is longer than or shorter than your stick.

Trace your 3-stick and your crayon to compare their lengths.

In your classroom, find a marker, and make a stick that is longer than your marker.

Trace your stick and your marker to compare their lengths.

Make a 5-stick. Find something in the classroom that is longer than your 5-stick.

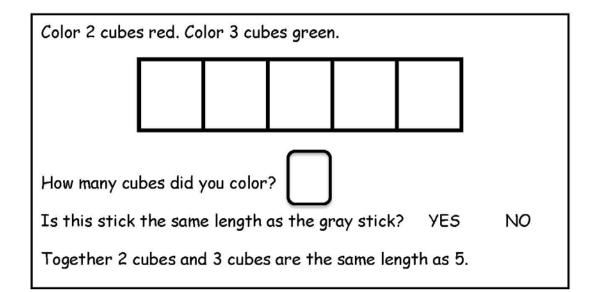
Trace your 5-stick and the object to compare their lengths.

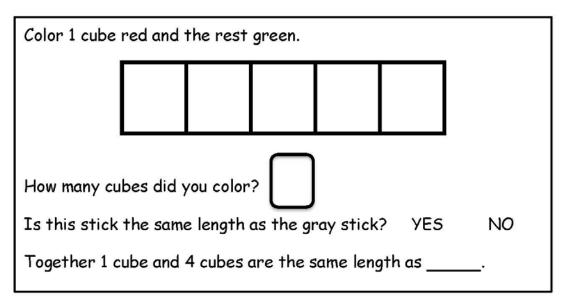


Name	Date	

These boxes represent cubes.









Trace a 6-stick. Find something the same length as your 6-stick. Draw a picture of it here.

Trace a 7-stick. Find something the same length as your 7-stick. Draw a picture of it here.

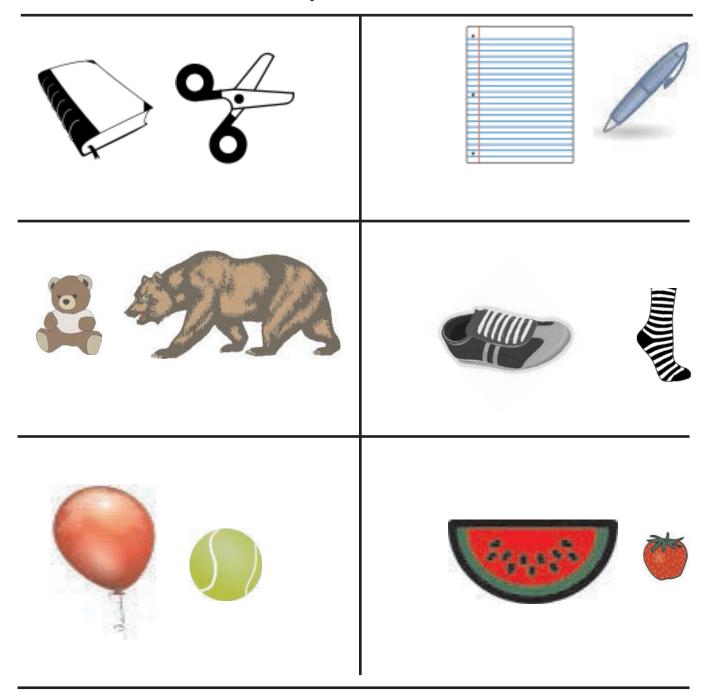
Trace an 8-stick. Find something the same length as your 8-stick. Draw a picture of it here.



Name

Date	

Which is heavier? Circle the object that is heavier than the other.



On the back, draw 3 objects that are lighter than your chair.



Lesson 8:



Draw more objects or cross out objects to make 5. Circle the group of 5.

0000	$\begin{array}{ccc} \triangle \bigtriangleup & \bigtriangleup \\ \triangle \bigtriangleup & \bigtriangleup \bigtriangleup \\ \end{array}$
	0000 000
$\triangle \triangle \triangle \triangle$	
000000	
	$\begin{array}{ccc} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ \end{array}$

make 5



Name _	Date		
	Lighter	Heavier	

lighter or heavier recording sheet



Lesson 9:

Compare objects using *heavier than, lighter than,* and *the same as* with balance scales.

Name	Date
	is as heavy as pennies.

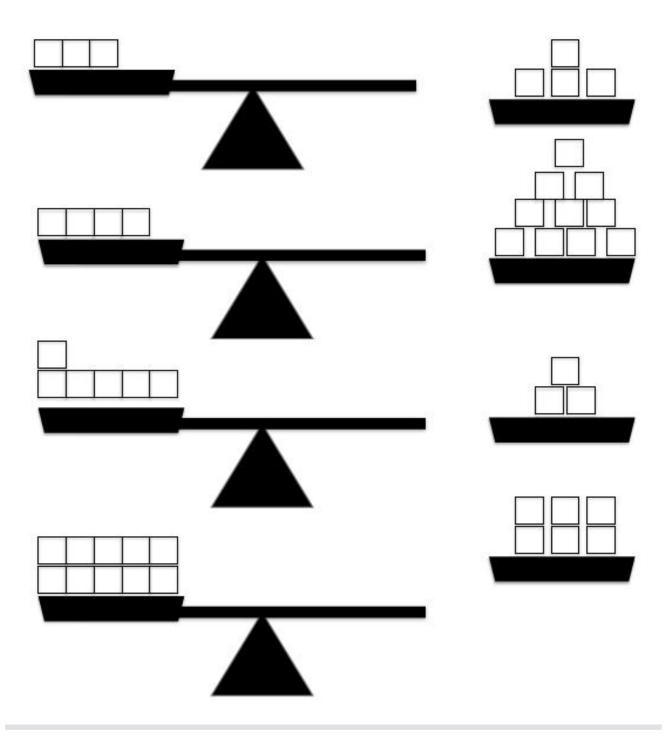
as heavy as recording sheet



Compare the weight of an object to a set of unit weights on a balance scale.

Name \_\_\_\_\_ Date \_\_\_\_\_

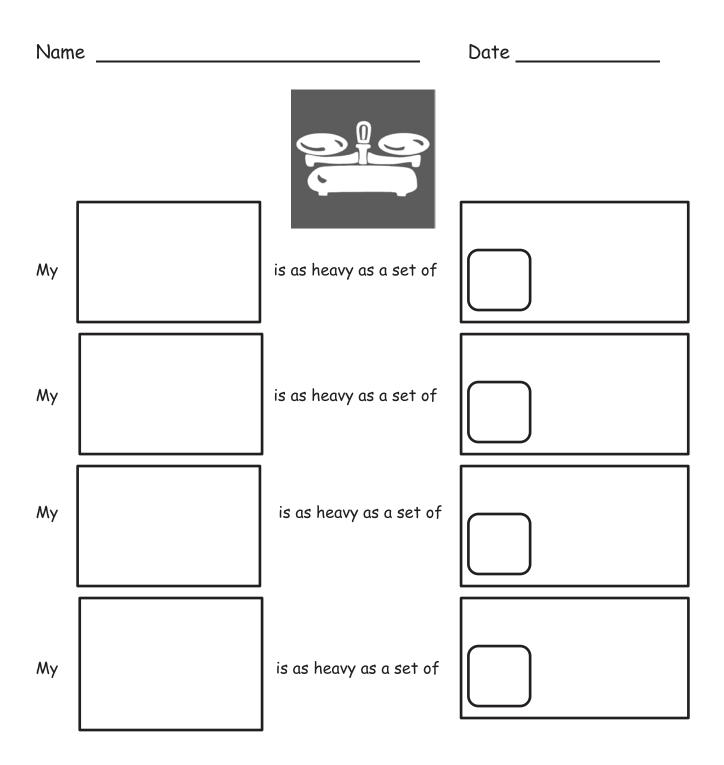
Draw a line from the balance to the linking cubes that weigh the same.





Lesson 11:

Observe conservation of weight on the balance scale.



as heavy as a set recording sheet



Name \_\_\_\_\_ Date \_\_\_\_

Date\_\_\_\_\_

Talk to your partner about which container might have more or less capacity. Which might have about the same capacity? What happens if the containers are not filled up to the top? Can we tell that they are filled completely from looking at the pictures?





Lesson 13:

Compare volume using *more than, less than,* and the same as by pouring.

I found out that this container held the most rice.

It had the biggest capacity.

I found out that this container held the least rice.

It had the smallest capacity.

capacity recording sheet



Lesson 13:

Compare volume using *more than, less than,* and *the same as* by pouring.

Name \_\_\_\_\_

Date \_\_\_\_\_

My cup of rice looks like:

Now it looks like:

Now it looks like:

Now it looks like:

volume recording sheet



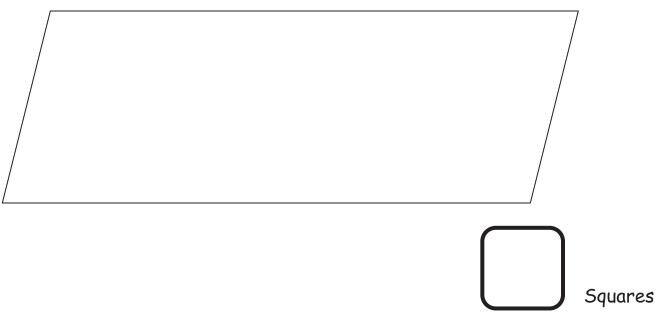
Lesson 14: Explore conservation of volume by pouring.

Name	Date
We've	e Got the Scoop! 🛛 🛶 🕀
	is the same as scoops.
	is the same as scoops.
	is the same as scoops.
scoops is the sa	me as
we've got the scoop recording sheet	ne as

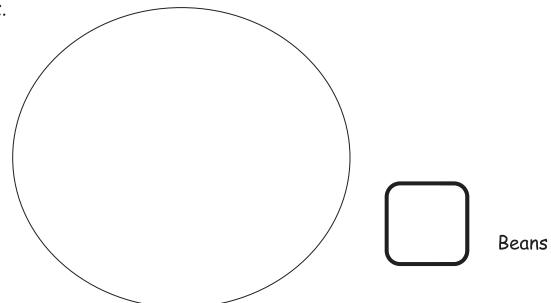
Name \_\_\_\_\_

Date \_\_\_\_\_

Cover the shape with squares. Count how many, and write the number in the box.



Cover the shape with beans. Count how many, and write the number in the box.





Lesson 16: Make informal comparison of area.

A STORY OF UNITS	Lesson 16 Template K•3
Name	Date
My square.	My square covered with a circle.
My square covered with little squares.	My square covered with beans.
my square recording sheet	



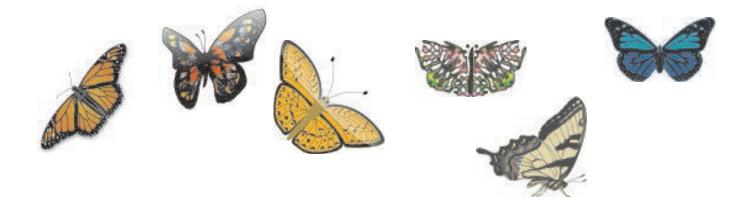


Name

Date	

Draw straight lines with your ruler to see if there are enough flowers for the butterflies.

\_\_\_\_\_

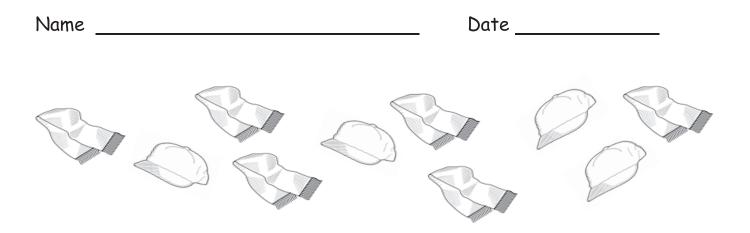




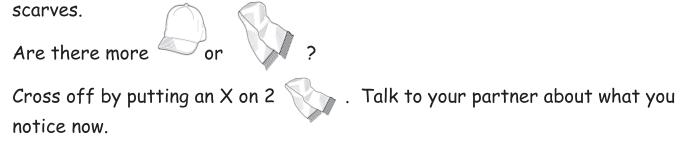
On the back, draw some plates. Draw enough apples so each plate has one.

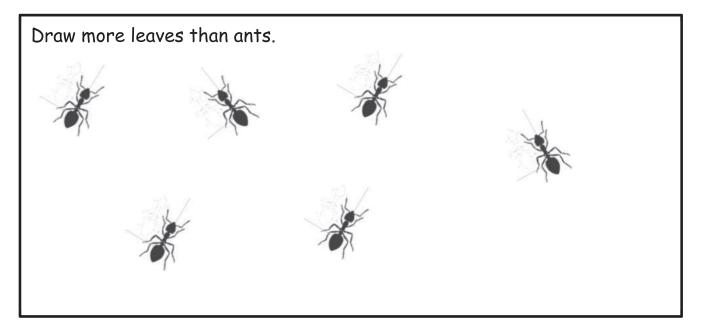






Draw straight lines with your ruler to see if there are enough hats for the





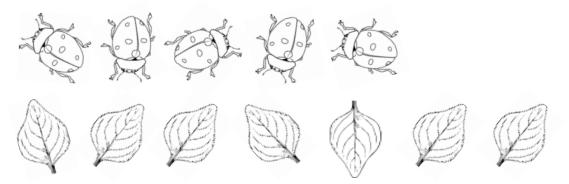




Name

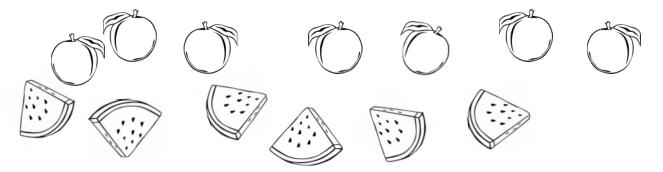
Date
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Count the objects. Circle the set that has fewer.



Draw more ladybugs so there are the same number of ladybugs as leaves.

Count the objects. Circle the set that has fewer.



Draw more watermelon slices so there are the same number of watermelon slices as peaches.

On the back, draw suns and stars. Draw fewer suns than stars.

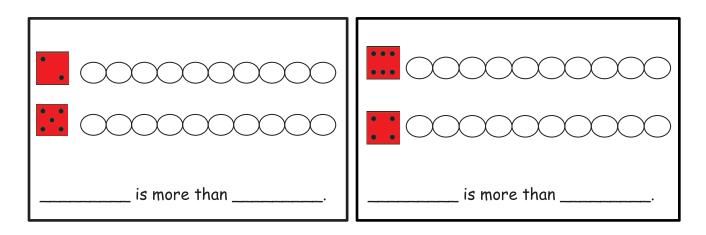




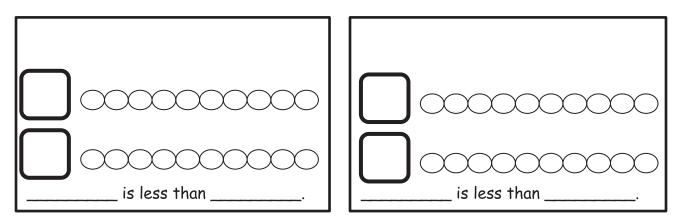
Name

Date
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Count the dots on the die. Color as many beads as the dots on the die. Circle the longer chain in each pair.



Roll the die. Write the number you roll in the box and color that many beads. Roll the die again, and do the same on the next set of beads. Circle the chain with fewer beads.



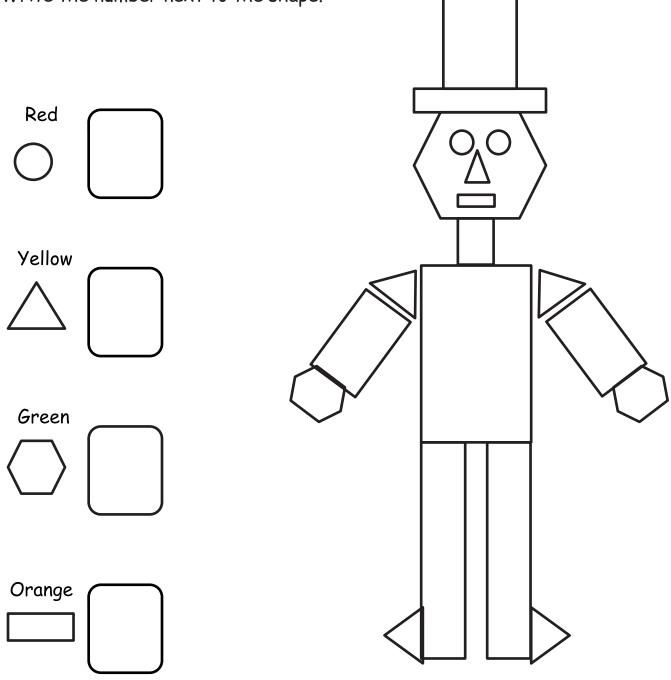
On the back, make more chains by rolling the die. Write the number you rolled, and then make a chain with the same number you rolled.





Name \_\_\_\_\_ Date \_\_\_\_\_

Color the shapes. Count how many of each shape is in the shape robot. Write the number next to the shape.

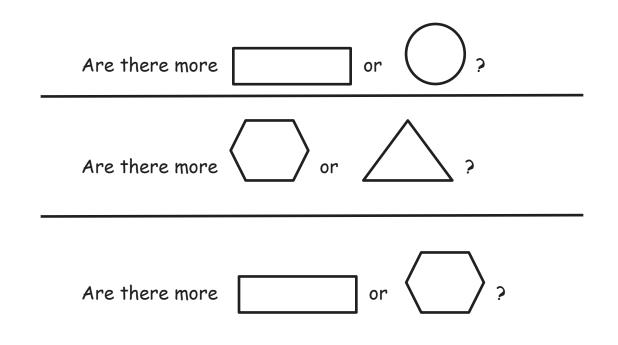




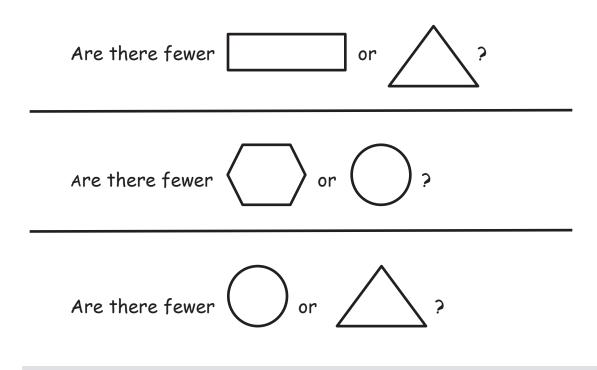
Lesson 21:

1: Compare sets informally using *more, less,* and *fewer*.

Look at the robot. Color the shape that has more.



Look at the robot. Color the shape that has fewer.





Lesson 21:

L: Compare sets informally using *more, less,* and *fewer*.

Name	Date	

Draw a shape to make the sentence true.

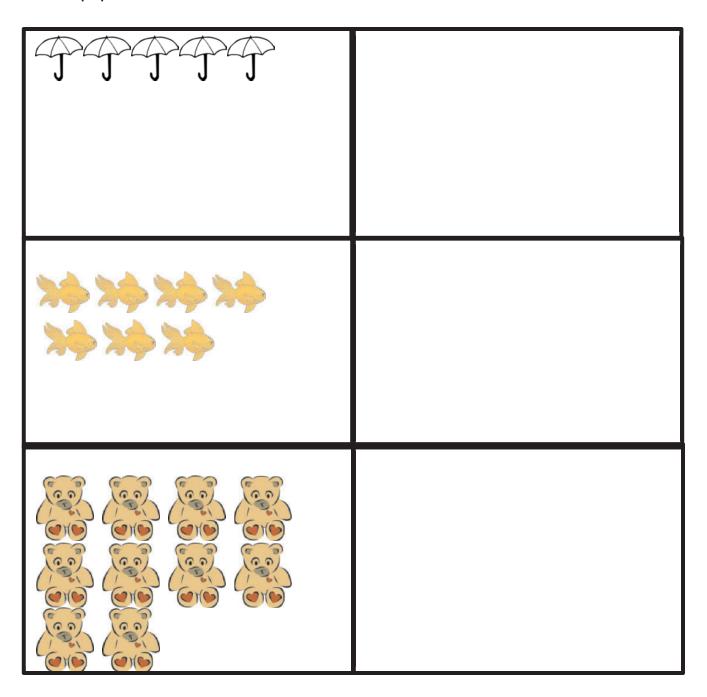
There are morethan
There are fewer
There are fewerthan
more than, fewer than recording sheet   EIIDEMA Lesson 21:   Compare sets informally using more, less, and fewer.

MATH

Name \_\_\_\_\_

Date \_\_\_\_\_

Count the objects in the box. Then, draw the same number of circles in the empty box.

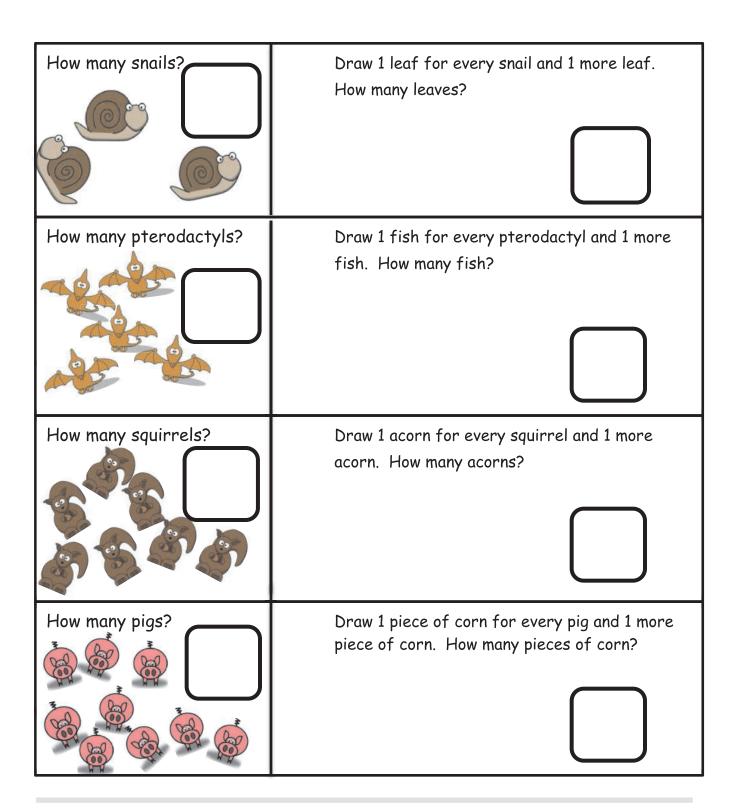




Draw a set of objects in the first box. Switch papers with a partner. Have your partner draw the same number of objects in the next box.



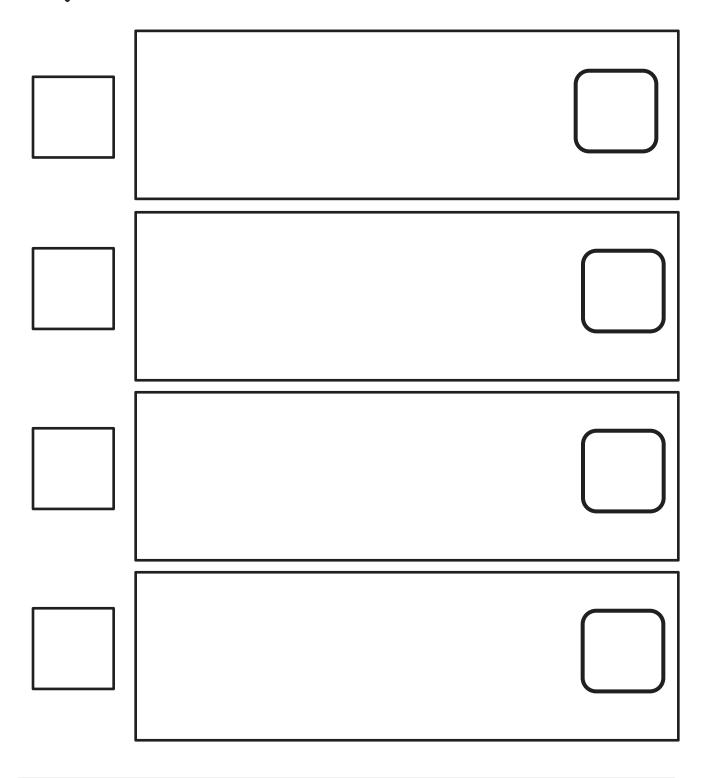
Name Date
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**23:** Reason to identify and make a set that has 1 more.

Roll the die. Draw the number of dots in the first box. Then, draw a set of objects that has 1 more. Write the number in the box.

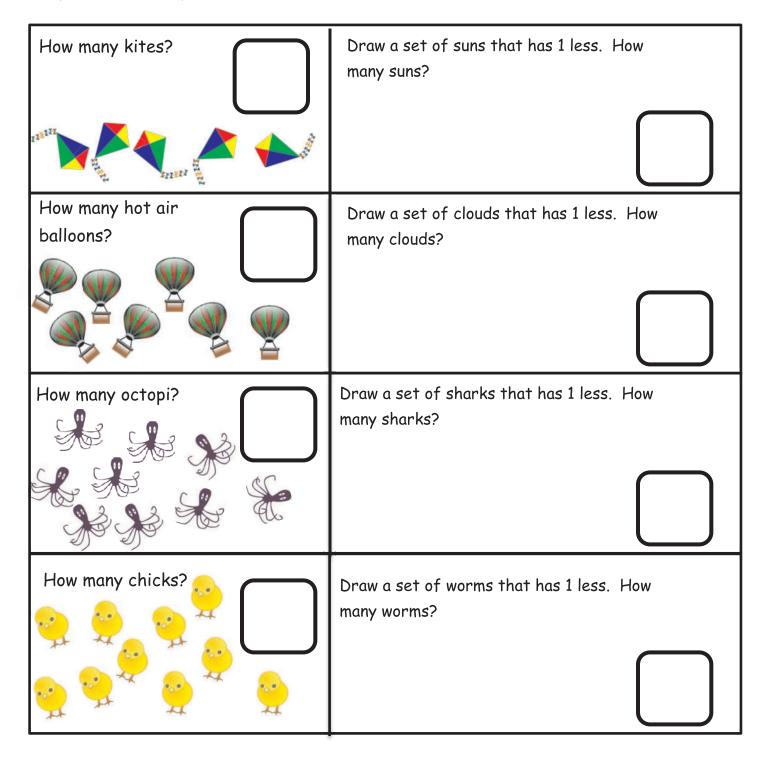




Name \_\_\_\_\_

Date \_\_\_\_\_

As you work, use your math words less than.

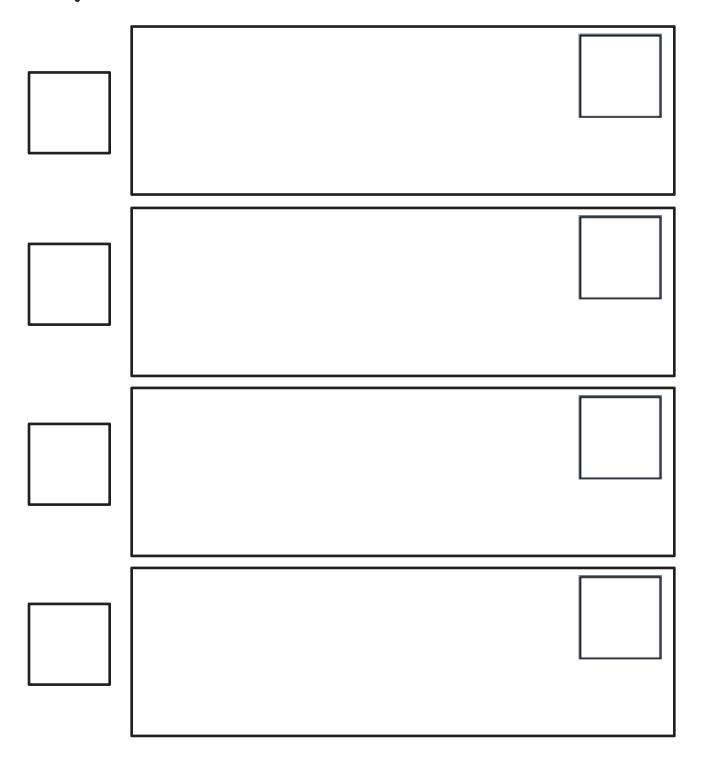




Lesson 24:

4: Reason to identify and make a set that has 1 less.

Roll the die. Draw the number of dots in the first box. Then, make a set of objects that has 1 less. Write the number in the box.

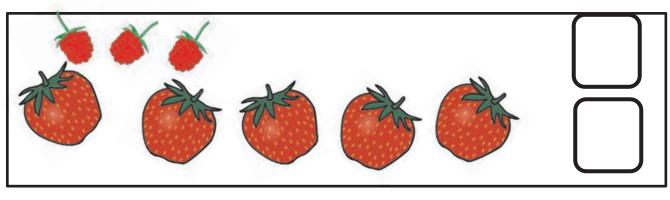




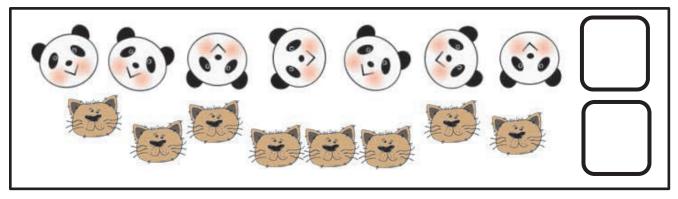
Name

Date \_\_\_\_\_

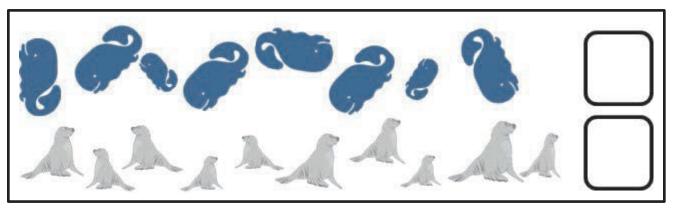
1. Count the objects in each line. Write how many in the box. Then, fill in the blanks below. Use the words more than to compare the numbers.



is more than \_



is more than \_



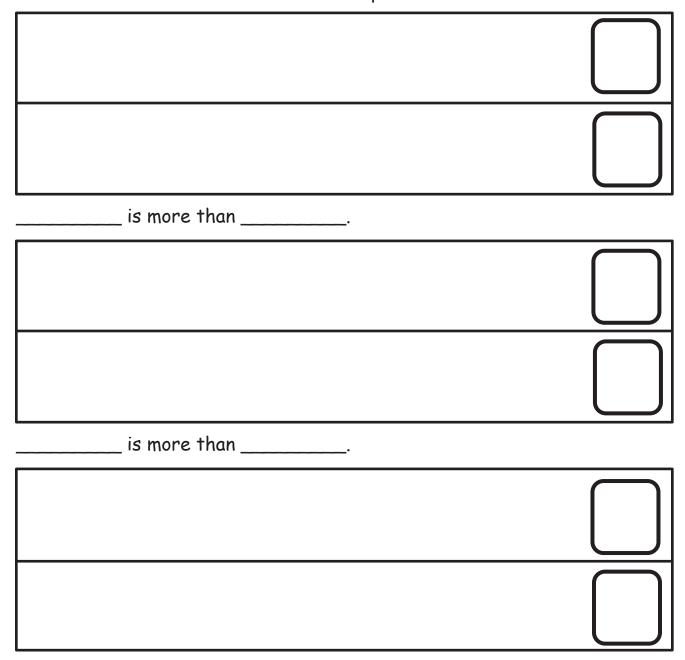
\_ is more than \_\_\_\_\_.



Lesson 25:

Match and count to compare a number of objects. State which quantity is more.

2. Roll a die, and draw a set of objects to match the number rolled. Write the number in the box. Roll the die again, and do the same in the next box. Use the words *more than* to compare the numbers.



\_\_\_\_\_ is more than \_\_\_\_\_.



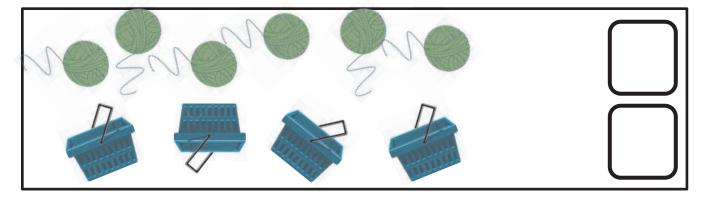
Lesson 25:

Match and count to compare a number of objects. State which quantity is more.

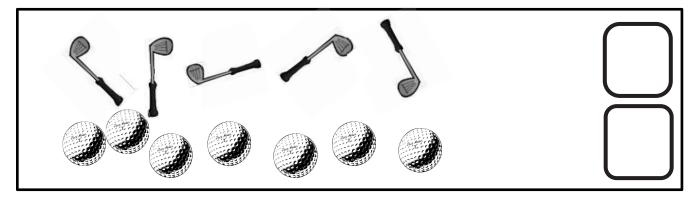
Name \_\_\_\_\_

Date \_\_\_\_\_

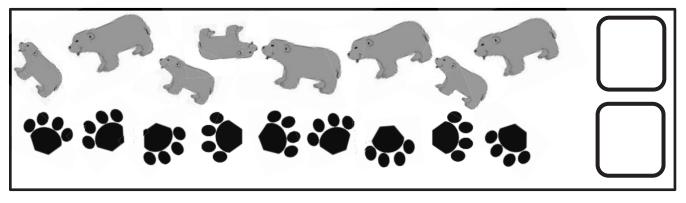
1. Count the objects in each line. Write how many in the box. Then, fill in the blanks below. Say your words *less than* out loud as you work.



\_\_\_\_ is less than \_\_\_\_\_.



\_\_\_\_ is less than \_\_\_\_\_.



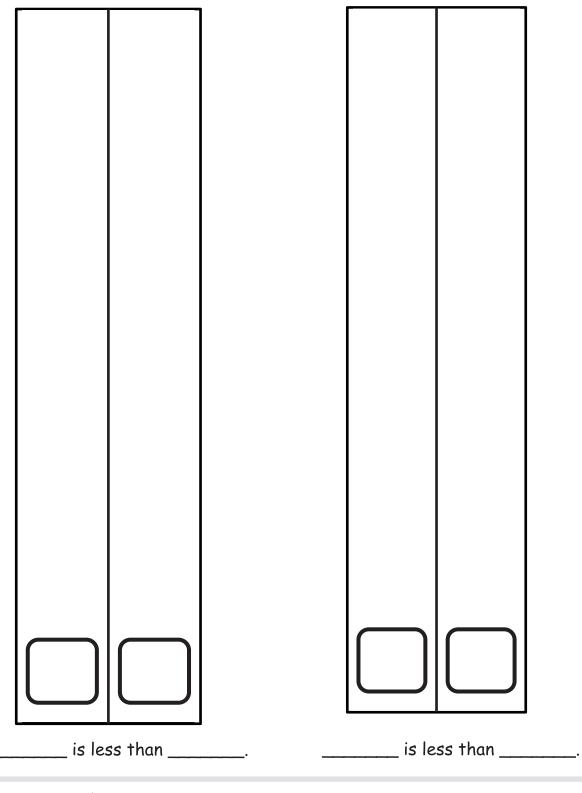
\_\_\_\_\_ is less than \_\_\_\_\_.



Lesson 26:

Match and count to compare two sets of objects. State which quantity is less.

2. Roll a die and draw the number of dots in the box. Then, draw a set of objects to match the number. Roll the die again, and do the same in the next





Lesson 26:

Match and count to compare two sets of objects. State which quantity is less.

Name Date _	
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Draw a tower with more cubes.	Draw a train with fewer cubes.	Draw a tower with more cubes.
is more than	is less than	is more than

Draw a train. Draw another train with fewer cubes.			
is more than	is less than		



Name \_\_\_\_\_ Date \_\_\_\_

Visualize the number in Set A and Set B. Write the number in the sentences.

3		5
Set A		Set B
	is more than	
	is less than	
7 Set A		6 Set B
	_ is more than	
	is less than	





8 Set A		6 Set B
	is more than	·
	is less than	
9 Set A		10 Set B
	is more than	_, . , . , . , <b>.</b> .
	is less than	

Roll a die twice, and write both numbers on the back. Circle the number that is more than the other.

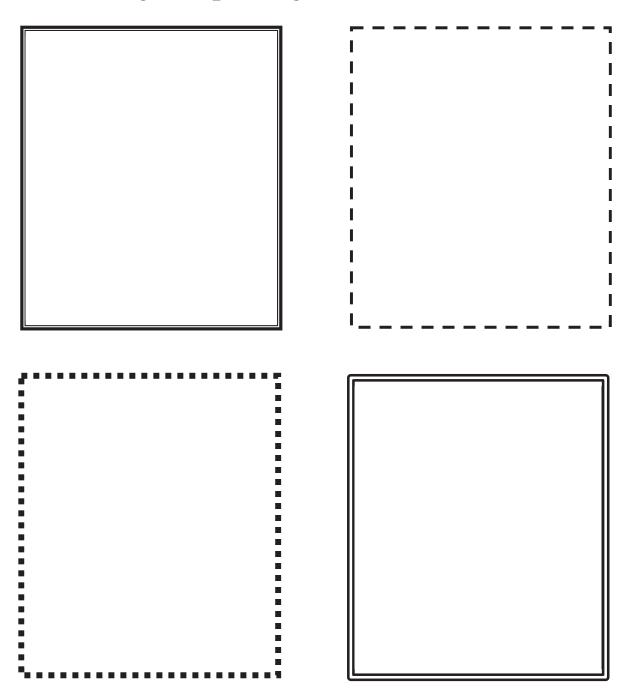




Name

Date	
Juio	

## *My Capacity Museum!*



my capacity museum recording sheet



Lesson 29:

Observe cups of colored water of equal volume poured into a variety of container shapes.

A STORY OF UNITS		Lesson 30 Template K•3
Name	Clay Shapa	_ Date
	Clay Shape	s

clay shapes recording sheet



N	ame	
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Listen to the directions, and draw the imaginary animal inside the box.

Draw a rectangle body as long as a 5-stick. Draw 4 rectangle legs each as long as your thumb. Draw a circle for a head as wide as your pinky. Draw a line for a tail shorter than your pencil. Draw in eyes, a nose, and a mouth.

Imaginary Animal



Lesson 31:

Use benchmarks to create and compare rectangles of different lengths to make a city

A STORY OF UNITS	Lesson 32 Template K•3
Na me	Date

comparing attributes recording sheet







## Video tutorials: http://embarc.online



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