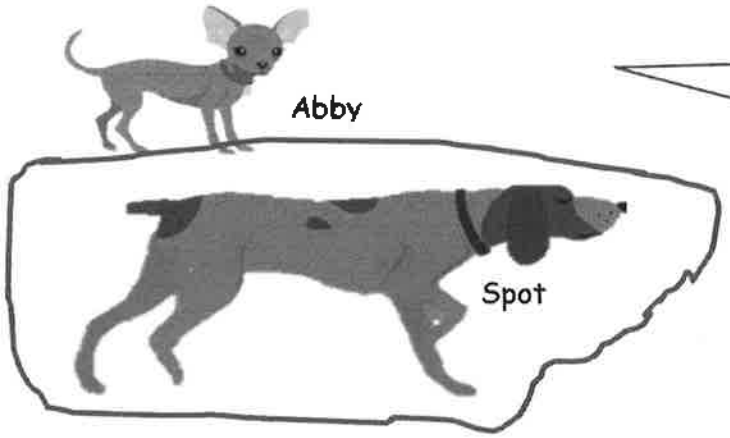
Homework Helpers

Grade 1 Module 3

G1-M3-Lesson 1

1. Follow the directions. Complete the sentence.

Circle the **longer** dog.



I can see that Spot is longer because Spot and Abby are lined up perfectly, and Spot is sticking out further than Abby.

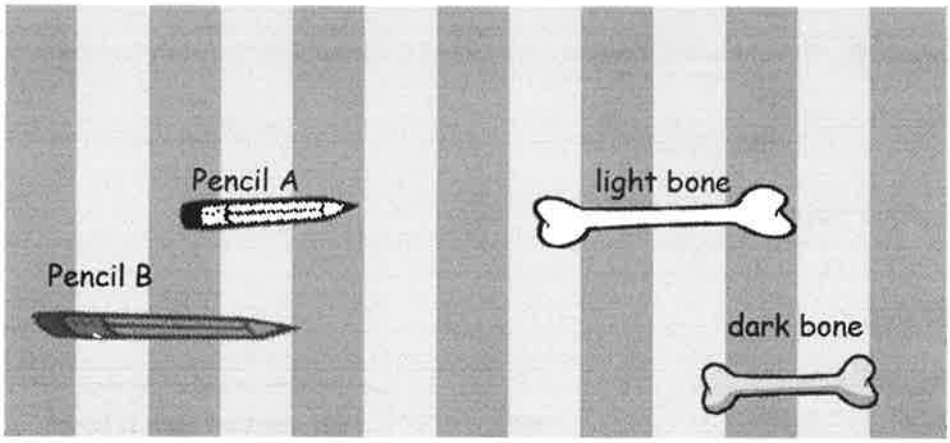
Spot is longer than *Abby*.

2. Write the words **longer than** or **shorter than** to make the sentence true.

The endpoints of the bottles are lined up. It's like they are standing on a table, which makes it easy to see. The glue is shorter!

The glue is *shorter than* the ketchup.

3.



Pencil B is ___*longer than*___ Pencil A.

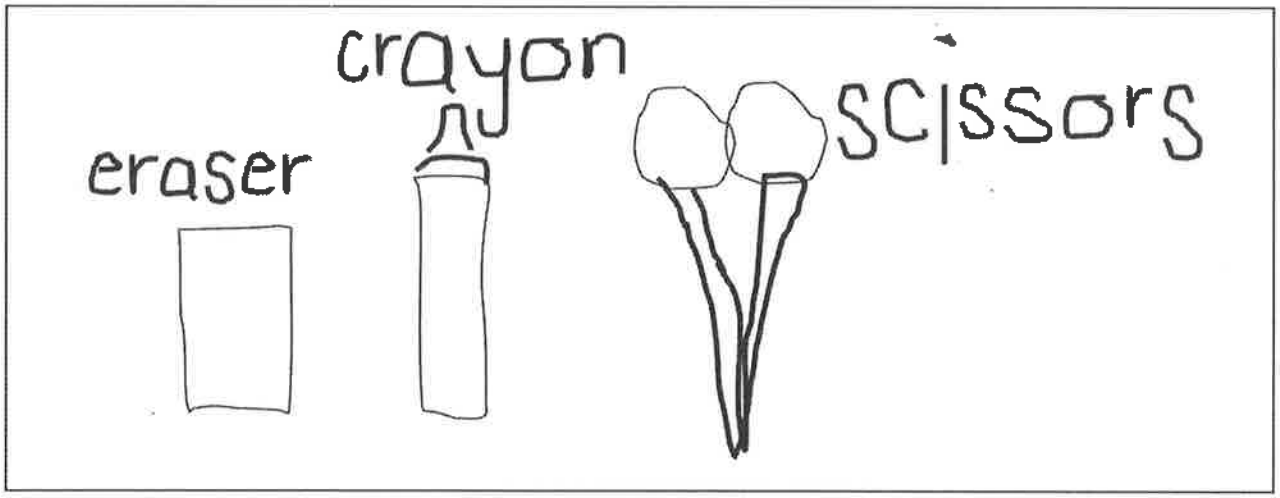
The dark bone is ___*shorter than*___ the light bone.

The end points are not lined up, but I can tell that Pencil B is longer because it crosses more than 3 stripes. Pencil A only crosses 2 stripes.

Circle true or false.

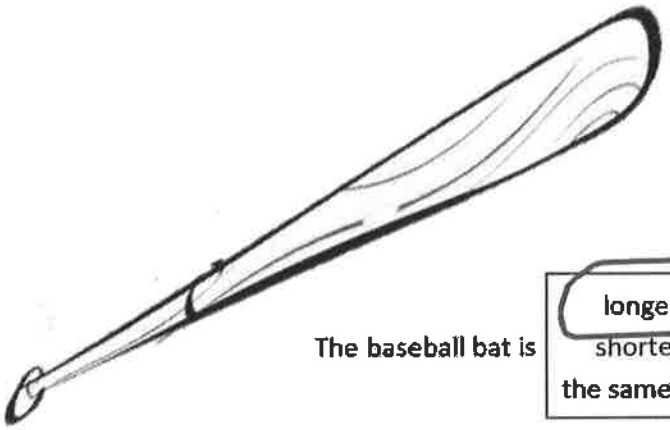
The light bone is shorter than Pencil A. **True** or **False**

4. Find 3 school supplies. Draw them here in order from **shortest** to **longest**. Label each school supply.



G1-M3-Lesson 2

1. Use the paper strip provided by your teacher to measure each picture. Circle the words you need to make the sentence true. Then, fill in the blank.



I can see if the paper strip is longer or shorter than the baseball bat by lining up the endpoint of the paper strip with the endpoint of the bat. Then I can compare them!

The baseball bat is (longer than / shorter than / the same length as) the paper strip.

The book is (longer than / shorter than / the same length as) the paper strip.

I know the baseball bat is longer than the paper strip, and the book is shorter than the paper strip, so the baseball bat must be longer than the book!

The baseball bat is ***longer than*** the book.

2. Complete the sentences with **longer than, shorter than**, or **the same length as** to make the sentences true.

The tube is *longer than* the bucket.

I used my paper strip to measure. The tube is longer than the paper. The bucket is shorter than the paper strip, so I know that the tube must be longer than the bucket.

Use the measurements from Problems 1 and 2. Circle the word that makes the sentences true.

3. The baseball bat is (longer/shorter) than the bucket.

If the baseball bat is longer than the paper strip, and the bucket is shorter than the paper strip, then the bat is longer than the bucket!

4. Order these objects from shortest to longest: bucket, tube, and paper strip

bucket *paper strip* *tube*

The bucket is shorter than the paper strip, and the paper strip is shorter than the tube, so the bucket is the shortest, and the tube is the longest.

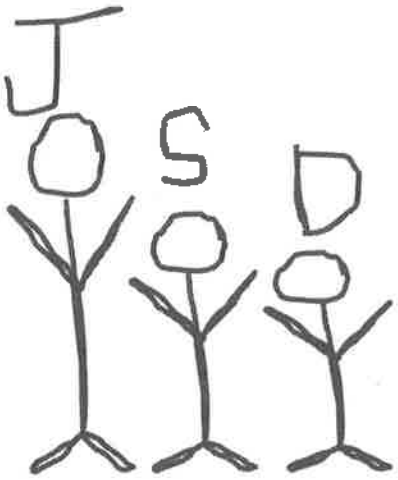
5. Draw a picture to help you complete the measurement statements. Circle the words that make each statement true.

Susie is taller than Donnie.

Jason is taller than Susie.

Donnie is (taller than / shorter than) Jason.

First I draw Susie and Donnie. Then I draw Jason. Since Donnie is shorter than Susie, and Susie is shorter than Jason, Donnie is also shorter than Jason!



G1-M3-Lesson 3

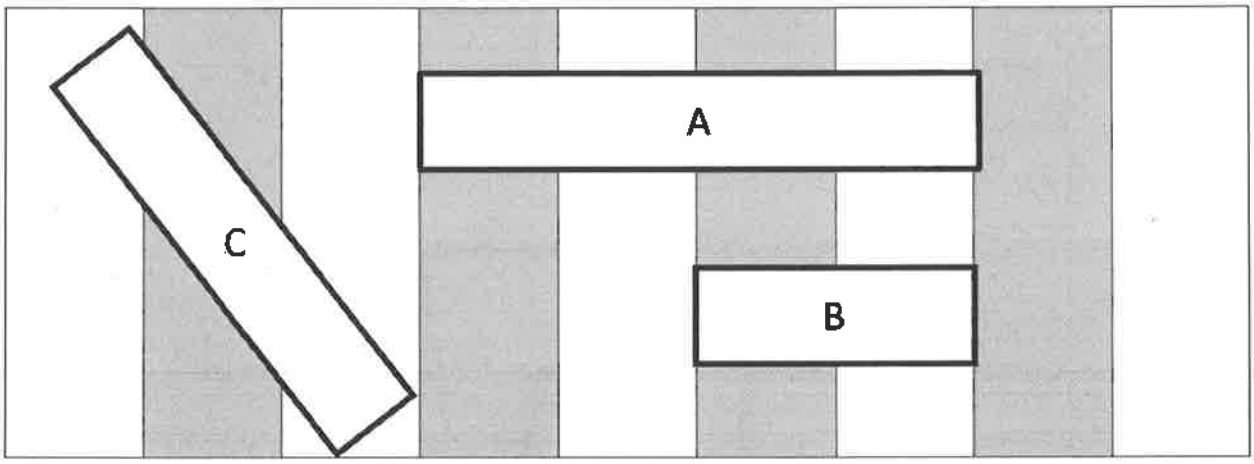
1. The string that measures the path from the doll house to the park is longer than the path between the park and the store. Circle the shorter path.

the doll house to the park

the park to the store

If the string is longer, then the path is also longer!

Use the picture to answer the questions about the rectangles.



2. Which is the shortest rectangle? *Rectangle B*

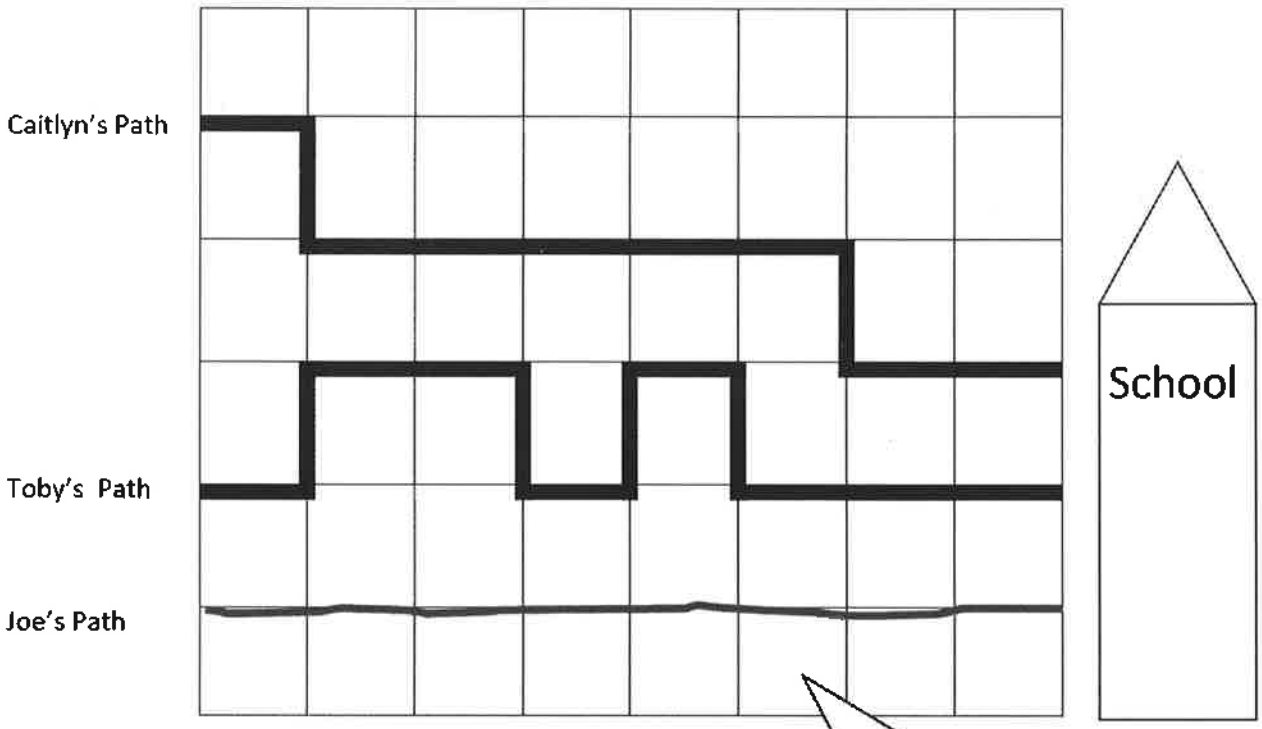
3. If Rectangle A is longer than Rectangle C, the longest rectangle is *Rectangle A*

4. Order the rectangles from shortest to longest:

B *C* *A*

I can see that Rectangle B is the shortest, and it says that Rectangle A is longer than Rectangle C, so the order must be B, C, A!

Use the picture to answer the questions about the students' paths to school.



5. How long is Caitlyn's path to school? 10 blocks

6. How long is Toby's path to school? 12 blocks

7. Joe's path is shorter than Caitlyn's. Draw Joe's path.

Caitlyn's path is 10 blocks, so Joe's path has to be 9 blocks or less. I just made a straight line for Joe's path, and that makes it 8 blocks!

Circle the correct word to make the statement true.

8. Toby's path is longer/shorter than Joe's path.

9. Who took the shortest path to school? Joe

Joe's path is the shortest. It is just 8 blocks straight to school with no turns. Toby's path is 12 blocks. 12 blocks is a longer walk than 8 blocks.

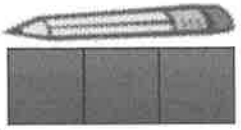
10. Order the paths from shortest to longest.

Joe Caitlyn Toby

G1-M3-Lesson 4

Measure the length of the picture with your cubes. Complete the statement below.

1. The pencil is __3__ centimeter cubes long.

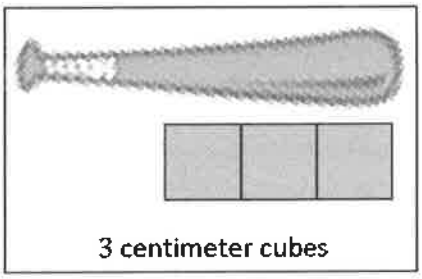


I can measure the pencil with my centimeter cubes. I have to line up the end points and make sure there is no space between each cube.

I start at the tip of the pencil and use enough cubes to go all the way to the eraser.

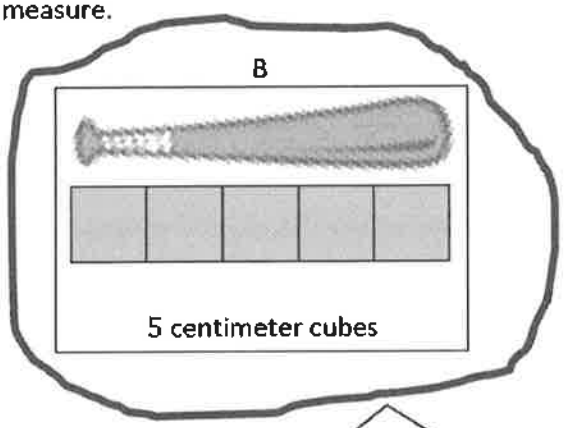
2. Circle the picture that shows the correct way to measure.

A



This isn't right! There are no cubes near the handle of the bat!

B



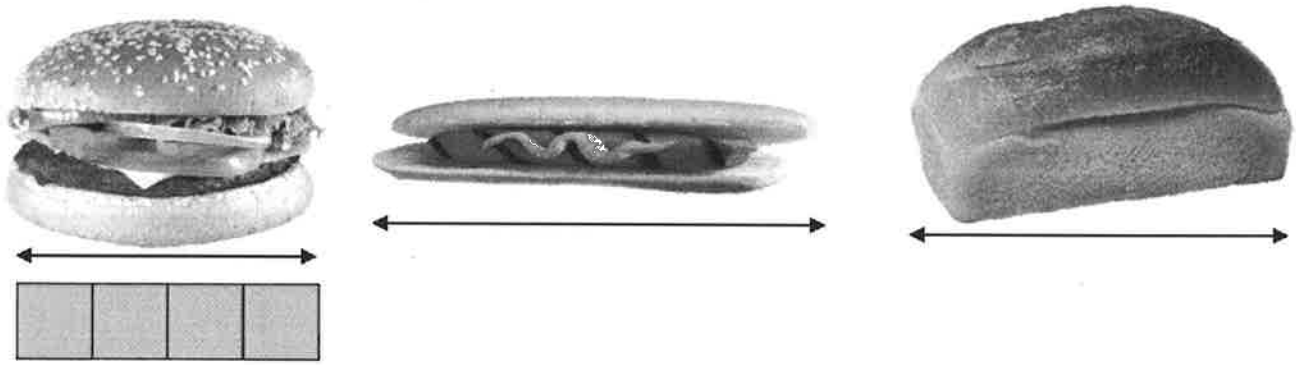
This looks much better. The cubes start at the endpoint and go all the way across with no spaces in between.

3. Explain what is wrong with the measurements for the picture you did NOT circle.

The picture that shows a measurement of 3 cubes is wrong because the cubes don't go all the way across the bat. The cubes don't start at the endpoint or end at the endpoint. There are not enough cubes!

G1-M3-Lesson 5

1. Use centimeter cubes to measure the pictures below. Complete the sentences.



I can measure these pictures accurately as long as I line up the endpoints and don't leave any gaps or overlaps with my centimeter cubes.

Each of my cubes is one centimeter long.

a. The hamburger picture is __4__ centimeters long.

b. The hot dog picture is __6__ centimeters long.

c. The bread picture is __5__ centimeters long.

The bread picture measured 5 centimeter cubes long. That makes it 5 centimeters long.

2. Use the picture measurements to order the hamburger picture, hot dog picture, and bread picture from longest to shortest. You can use drawings or names to order the pictures.

Longest → Shortest

hot dog picture *bread picture* *hamburger picture*

The hot dog picture is the longest; it's 6 centimeters long. The hamburger picture is the shortest since it's only 4 centimeters long. That means the bread picture goes in the middle.

3. Fill in the blanks to make the statements true. (There may be more than one correct answer.)

   a. The hot dog picture is longer than the ___*bread*___ picture.

   b. The bread picture is longer than the _*hamburger*_ picture and shorter than the ___*hot dog*___ picture.

   c. If a banana picture is added that is longer than the bread picture, it will also be longer than which of the other pictures? _*hamburger*_

G1-M3-Lesson 6

1. Order the bugs from longest to shortest by writing the bug names on the lines. Use centimeter cubes to check your answer. Write the length of each bug in the space to the right of the pictures.

   The bugs from longest to shortest are

   Caterpillar *Dragonfly* *Bee*

Dragonfly

5 centimeters

The caterpillar is the longest bug. The caterpillar is 7 centimeters long!

Caterpillar

7 centimeters

The bee is the shortest bug. The bee is only 4 centimeters long!

Bee

4 centimeters

2. Use all of the bug measurements to complete the sentences.

   a. The fly is longer than the ___bee___ and shorter than the _caterpillar_.

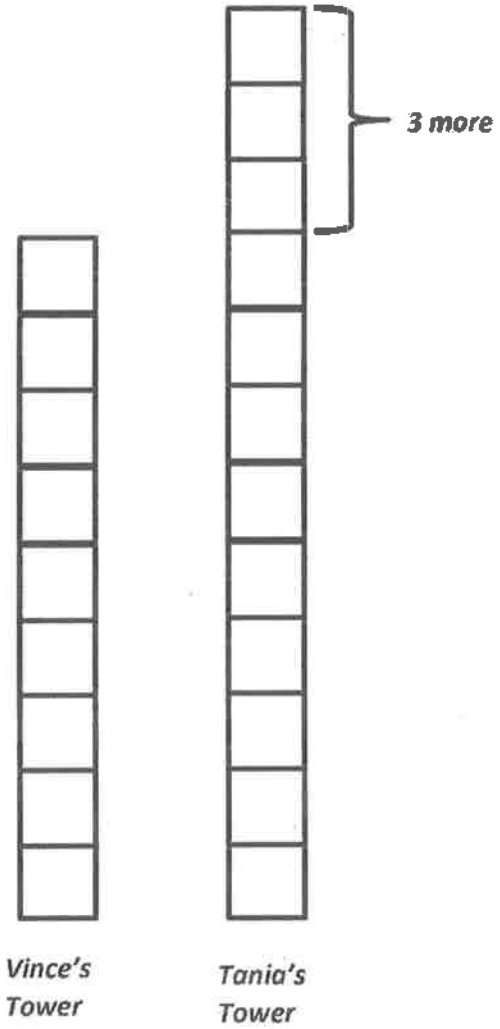
   b. The ___bee___ is the shortest bug.

   c. If another bug is added that is shorter than the bee, list the bugs that the new bug is also shorter than.

   The new bug will be shorter than the fly and the caterpillar.

The bee is the shortest bug, so if a bug is shorter than the bee, it is also shorter than all the other bugs.

3. Tania makes a cube tower that is 3 centimeters taller than Vince's tower. If Vince's tower is 9 centimeters tall, how tall is Tania's tower?



To solve, I can use Read, Draw, Write! Now that I have read the problem, what can I draw? I think I can draw the towers! I can start with Vince's tower since I know his is 9 cubes tall.

I can write a number sentence to solve. 9 cubes + 3 cubes equals 12 cubes.

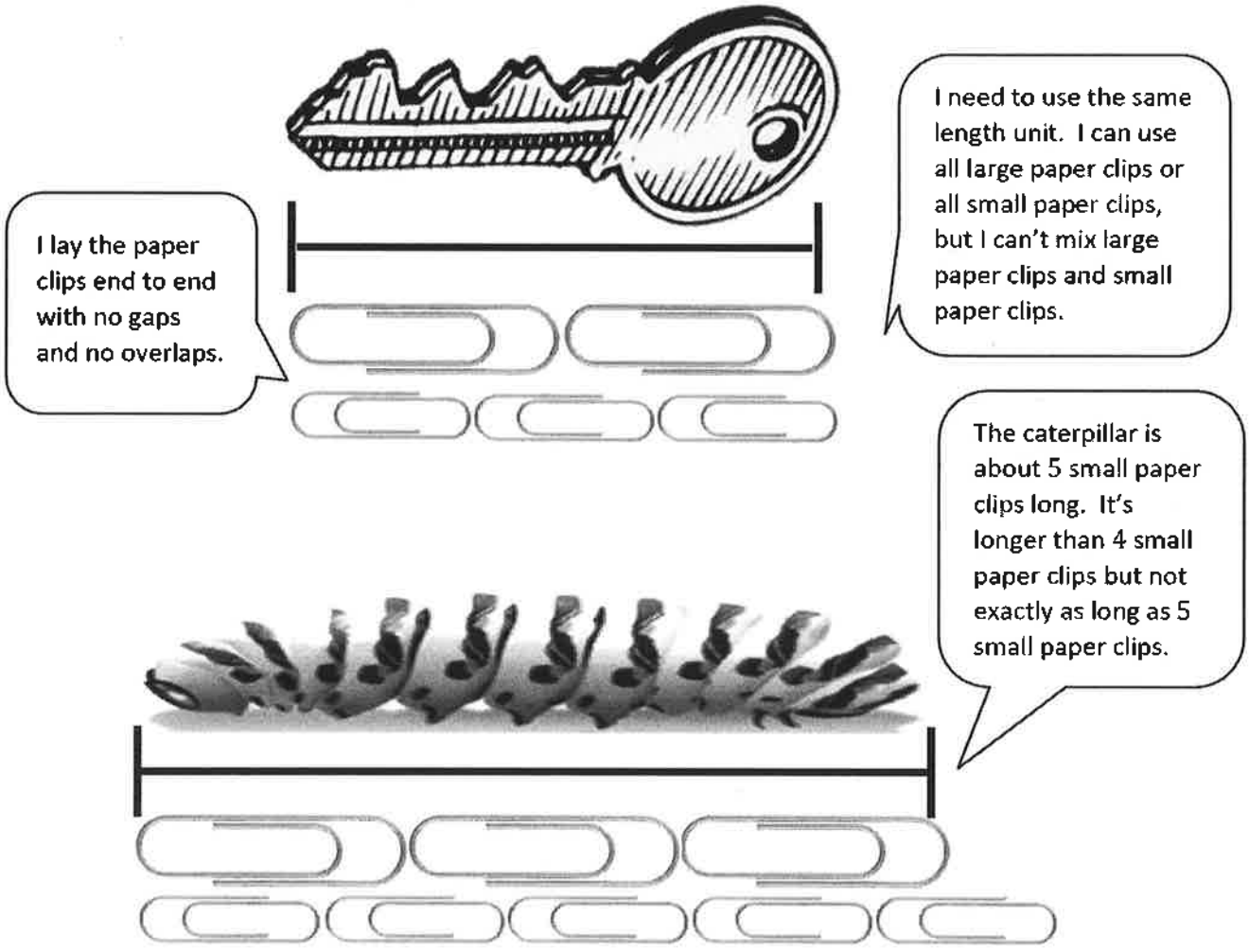
$$9 + 3 = 12$$

Tania's tower is 12 cubes tall.

G1-M3-Lesson 7

Measure the objects with the large paper clip strip (included with homework paper) and then again with the small paper clip strip (included with homework).

Fill in the chart on the back of the page with your measurements.

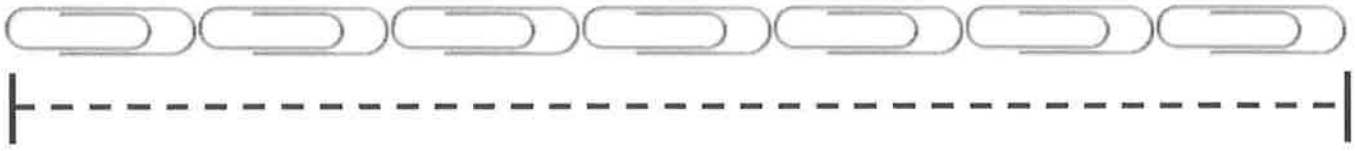


Name of Object	Length in Large Paper Clips	Length in Small Paper Clips
a. key	2	3
b. caterpillar	3	5

I knew that the length in small paper clips would be a bigger number. The smaller the length unit, the larger the measurement!

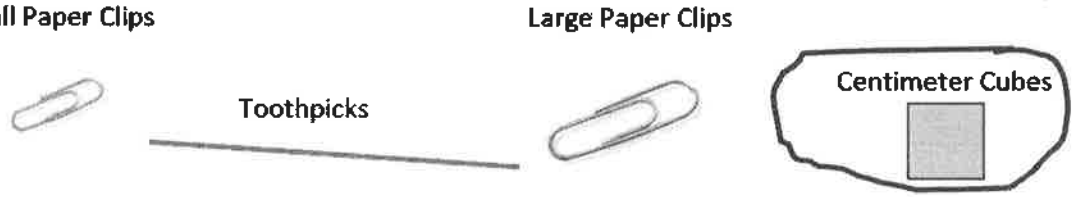
Large paper clip strip.

Small paper clip strip



G1-M3-Lesson 8

1. Circle the length unit you will use to measure. Use the same length unit for all objects.



Measure each object listed on the chart, and record the measurement. Add the names of other objects in the classroom, and record their measurements.

Classroom Object	Measurement
a. glue stick	8 *centimeter cubes*
b. dry erase marker	12 *centimeter cubes*
c. unsharpened pencil	19 *centimeter cubes*
d. new crayon	9 *centimeter cubes*

2. Did you remember to add the name of the length unit after the number? (Yes) No

I have to say centimeter cubes. If not, someone might think I am measuring with some other kind of cube!

3. Pick 3 items from the chart. List your items from longest to shortest:

a. *unsharpened pencil*

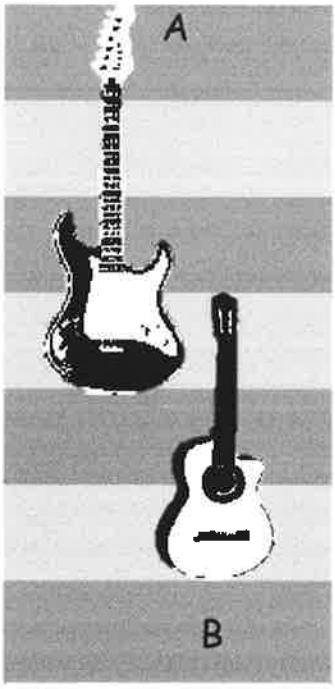
b. *dry erase marker*

c. *glue stick*

I started with the longest thing I measured, the unsharpened pencil. Then I wrote the shortest one, the glue stick. Then I put the dry erase marker in the middle because it is shorter than the unsharpened pencil but longer than the glue stick.

G1-M3-Lesson 9

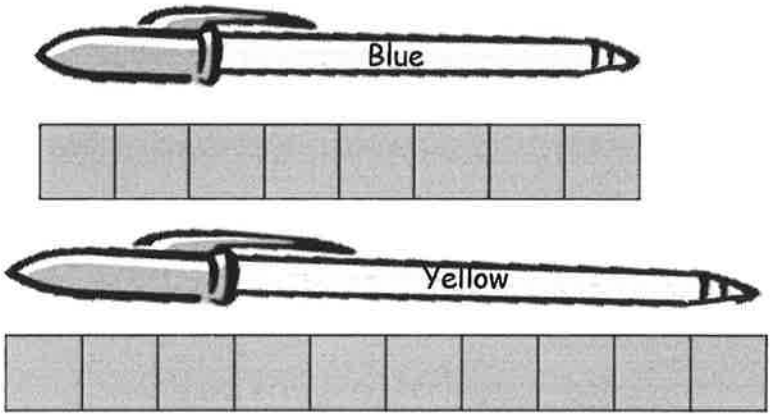
1. Look at the picture below. How much longer is Guitar A than Guitar B?



Guitar A is 1 unit(s) **longer** than Guitar B.

Guitar A is 4 units long. Guitar B is 3 units long. $4 - 3 = 1$, so Guitar A is 1 unit longer.

2. Measure each object with centimeter cubes.



The blue pen is *8 centimeter cubes*.

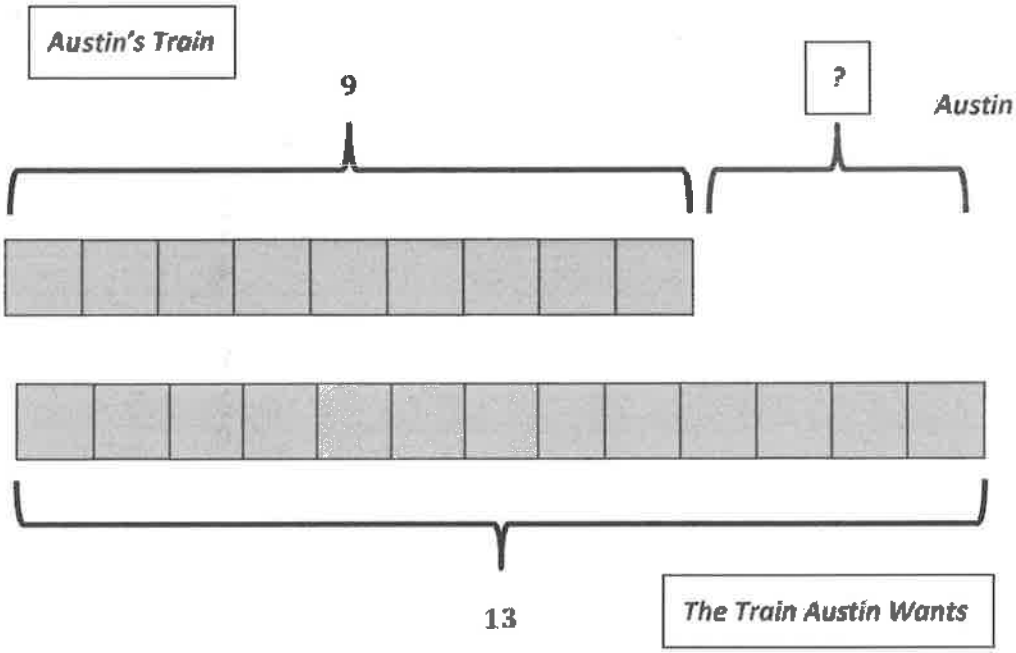
The yellow pen is *10 centimeter cubes*.

3. How much **longer** is the yellow pen than the blue pen?

   The yellow pen is _2_ centimeters longer than the blue pen.

Use your centimeter cubes to model the problem. Then, solve by drawing a picture of your model and writing a number sentence and a statement.

4. Austin wants to make a train that is 13 centimeter cubes long. If his train is already 9 centimeter cubes long, how many more cubes does he need?



$9 + \boxed{4} = 13$

Austin needs 4 more cubes.

I can use an addition sentence or a subtraction sentence to solve. I can say $13 - 9 = 4$, or I can say $9 + 4 = 13$.

G1-M3-Lesson 10

Students were asked about their favorite kind of fruit. Use the data below to answer the questions.

Ice Cream Flavor	Tally Marks	Votes
Apple		2
Strawberry		4
Banana		8

1. Fill in the blanks in the table by writing the number of students who voted for fruit.

2. How many students chose apple as the fruit they like best?
   __2__ students

I can solve by adding $2 + 4$ since there are 2 students who like apple and 4 students who like strawberry.

3. What is the total number of students who like apple or strawberry the best?
   __6__ students

4. Which fruit received the least amount of votes? ___*apple*___

By looking at the tally marks, it's easy to see that the least number of people voted for apple.

5. What is the total number of students who like banana or apple the best?
   __10__ students

6. Which two flavors are liked by a total of 12 students?
   ___*strawberry*___ and ___*banana*___

I have to think about which two numbers can make 12. There is a 2, 4, and 8. $4 + 8 = 12$ so that means strawberry and banana were liked by 12 students.

7. Write an addition sentence that shows how many students voted for their favorite fruit.
   $2 + 4 + 8 = 14$

8. A group of people were asked to say their favorite color. Organize the data using tally marks, and answer the questions.

Orange	𝍸 ||
Yellow	𝍸 |||
Purple	||

I can count each vote and make a tally. It's a little harder than it was in class because I can't see which ones I have counted, so I just cross them off as I count.

9. Which color received the least amount of votes? *purple*

10. How many more people like yellow than purple?

I can see that yellow has two more tallies than purple.

2 students

11. What is the total number of people who like orange and purple the most?

9 students

12. Which two colors did a total of 11 people vote for?

7 students like orange, and 4 students like yellow. $7 + 4 = 11$.

orange and *yellow*

13. Write an addition sentence that shows how many people voted for their favorite color.

$7 + 4 + 2 = 13$

G1-M3-Lesson 11

Collect information about the block you live on. Use tally marks or numbers to organize the data in the chart below.

How many **brick buildings/houses** are on your street?	How many **two story buildings/houses** are on your street?	How many **one story buildings/houses** are on your street?	How many **grassy lawns** are on your street?	How many **buildings/houses with a garage** are on your street?
𝍸	𝍸 |	𝍸 𝍸	𝍸 𝍸 | | | |	𝍸 |

- Complete the question sentence frames to ask questions about your data.
- Answer your own questions.

It's easy to see that the most houses have grassy lawns because there are so many tallies!

1. How many *grassy lawns* are there? (Pick the the category that has the **most**.) 9

2. How many *brick buildings* are there? (Pick the item you have the **least** of.) 2

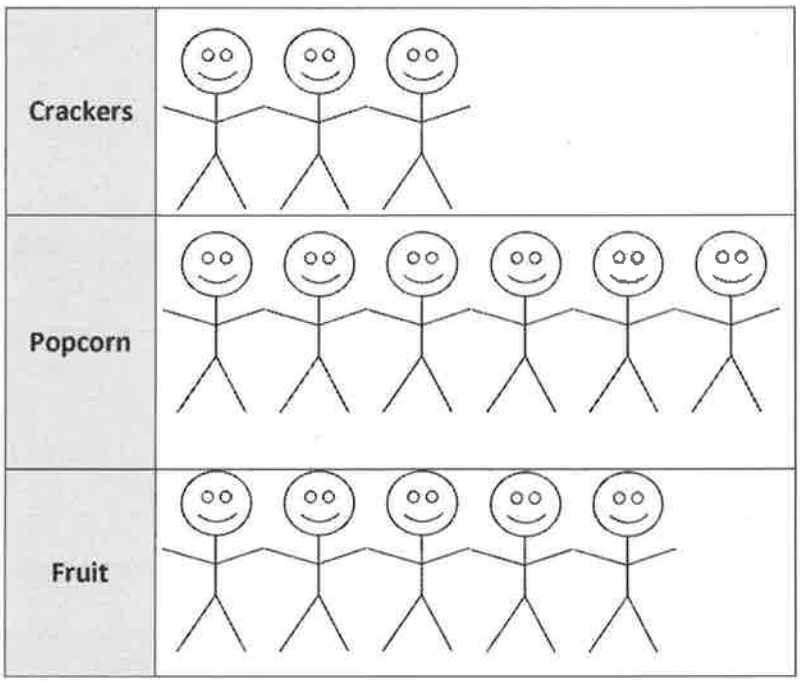
3. **Together**, how many brick houses and houses with garages are there? 8

4. Write and answer two more questions using the data you collected.

   a. *Are there more one story or two story houses* ? *There are more one story houses.*

   b. *Together, how many one story and two story houses are there* ? 9

Workers voted on their favorite snack food for the office kitchen. Each worker could only vote once. Answer the questions based on the data in the table.



3 workers chose crackers, and 5 chose fruit. $3 + 5 = 8$, so 8 workers chose fruit or crackers.

5. How many workers chose popcorn? 6 workers

6. How many workers chose fruit or crackers?
   8 workers

7. From this data, can you tell how many workers are in this office? Explain your thinking.

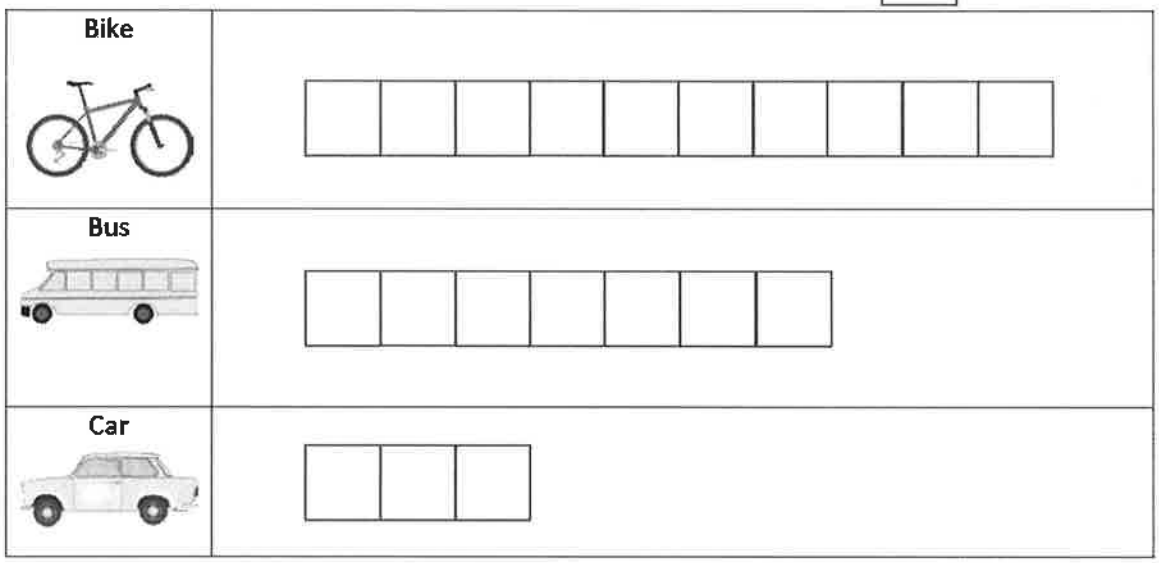
   I think there must be 14 workers in the office because I counted each person who voted. There could be more though because what if someone was absent that day or just did not vote?

I know that $3 + 6 = 9$, and then there are 5 more. $9 + 1 = 10$, and then I add on 4 more, and I get 14.

G1-M3-Lesson 12

The class has 20 students. 10 students ride their bikes to school, 7 ride the bus, and 3 come in a car. Use squares with no gaps or overlaps to organize the data. Line up your squares carefully.

How Students Came to School | Number of Students | ☐ represents 1 student



I line my squares up carefully with no gaps in between and no overlaps. I started from the same endpoint.

I can look at the number of students that rode a bike and the number of students that rode the bus. I can count how many more students rode a bike. 1, 2, 3 students!

1. How many more students rode a bike than rode the bus? 3 students

2. Write a number sentence to tell how many students were asked about how they come to school.

   $10 + 7 + 3 = 20$

I add the number of bike riders, bus riders, and car riders!

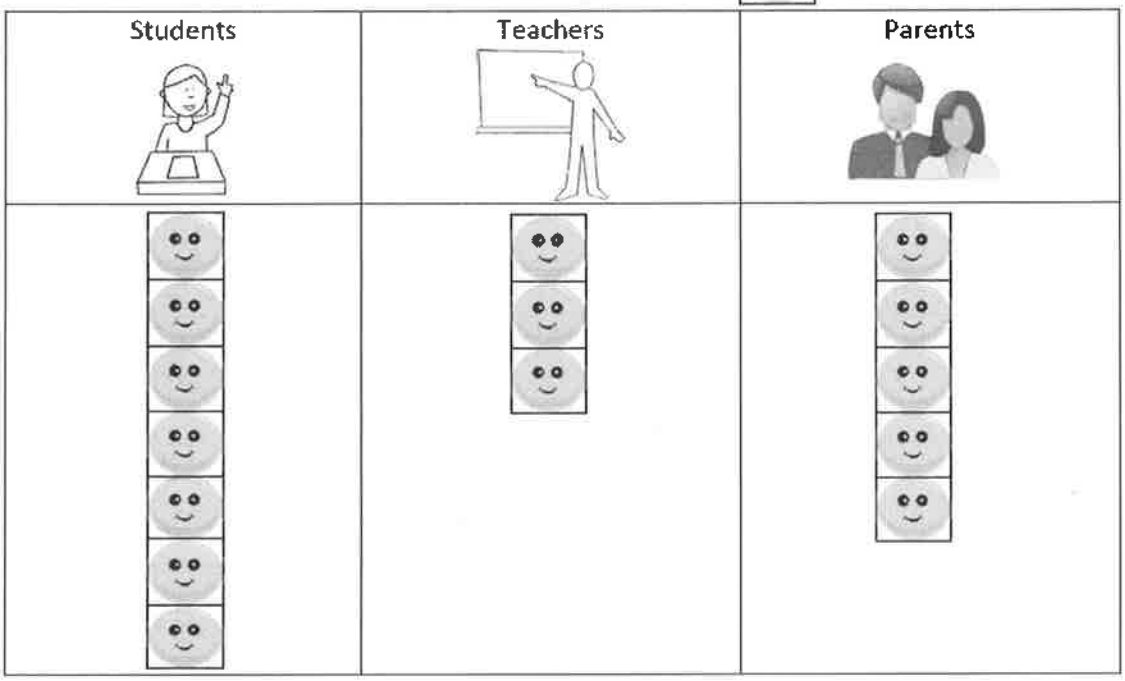
3. Write a number sentence to show how many fewer students rode in a car than the bus.

   $7 - 3 = 4$

G1-M3-Lesson 13

Use the graph to answer the questions. Fill in the blank, and write a number sentence.

Class Play Audience  represents 1 person



1. How many more students are at the play than teachers? $7 - 3 = 4$

   There are 4 more students than teachers.

2. How many fewer parents are at the play than students? $7 - 5 = 2$

   There are 2 fewer parents.

I can see which has more and which has less by looking at the squares. I can subtract to find how many more or less.

3. If 2 more teachers attend the play, how many people will be there? $5 + 5 + 7 = 17$

   There will be 17 people.

I can add 2 more teachers to the 3 teachers. This equals 5 teachers. I know 5 teachers and 5 parents equals 10 people. Then I can add the 7 students. $10 + 7 = 17$