

A Story of Units

Pleasanton Mathematics Curriculum



Grade 1 • MODULE 3

Ordering and Comparing Length Measurements as Numbers

Homework

Video tutorials: http://embarc.online

Info for parents: http://bit.ly/pusdmath

Version 3



Mathematics Curriculum



GRADE 1 • MODULE 3

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GRADE 1 • MODULE 3

Ordering and Comparing Length Measurements as Numbers

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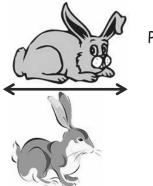
NOTE: Student sheets should be printed at 100% scale to preserve the intended size of figures for accurate measurements. Adjust copier or printer settings to *actual size* and set page scaling to *none*.



| Name | Date | |
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Follow the directions. Complete the sentences.

1. Circle the longer rabbit.

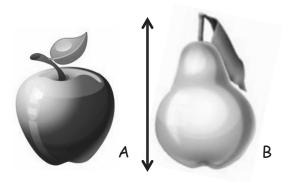


Peter

Floppy

_ is longer than _____.

2. Circle the shorter fruit.



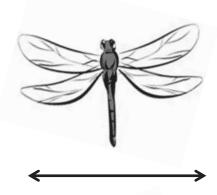
___ is shorter than ____.

Write the words longer than or shorter than to make the sentences true.

3.



4.



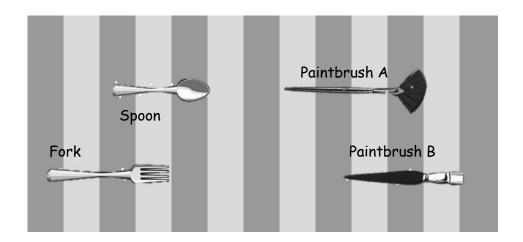
The glue

the ketchup.

The dragonfly's wing span

the butterfly's wing span.





- 5. Paintbrush A is ______ Paintbrush B.
- 6. The spoon is _____ the fork.
- 7. Circle true or false.

The spoon is shorter than Paintbrush B. True or False

8. Find 3 objects in your room. Draw them here in order from shortest to longest. Label each object.

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| vanie | Duie |

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.

1.





The sundae is

longer than shorter than the same length as

the paper.

The spoon is

longer than shorter than the same length as

the paper.

The **spoon** is the sundae.

2.



the cake. The **balloon** is _

3.





The ball is shorter than the paper.

So, the **shoe** is _____ the **ball**.

Lesson 2:

Compare length using indirect comparison by finding objects longer than, shorter than, and equal in length to that of a string.

Use the measurements from the first page. Circle the word that makes the sentences true.

- 4. The spoon is (longer/shorter) than the cake.
- 5. The balloon is (longer/shorter) than the sundae.
- 6. The shoe is (longer/shorter) than the balloon.
- 7. Order these objects from shortest to longest: cake, spoon, and paper

Draw a picture to help you complete the measurement statements. Circle the word that makes each statement true.

8. Marni's hair is shorter than Wesley's hair.

Marni's hair is longer than Bita's hair.

Bita's hair is (longer/shorter) than Wesley's hair.

9. Elliott is shorter than Brady.

Sinclair is shorter than Elliott.

Brady is (longer/shorter) than Sinclair.

| Name D | te |
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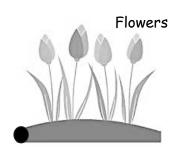
1. The string that measures the path from the garden to the tree is longer than the path between the tree and the flowers. Circle the shorter path.

the garden to the tree

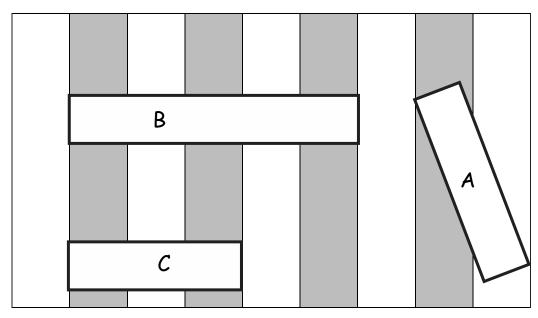
the tree to the flowers





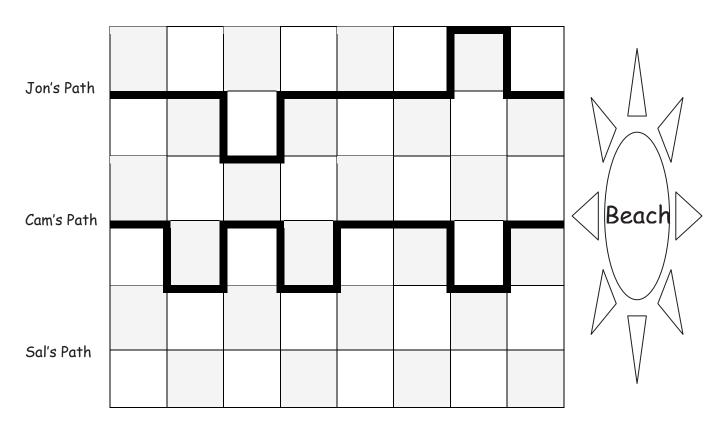


Use the picture to answer the questions about the rectangles.



- 2. Which is the longest rectangle?
- 3. If Rectangle A is longer than Rectangle C, the shortest rectangle is
- 4. Order the rectangles from shortest to longest.

Use the picture to answer the questions about the children's paths to the beach.



- 5. How long is Jon's path to the beach? _____ blocks
- 6. How long is Cam's path to the beach? _____ blocks
- 7. Jon's path is longer than Sal's path. Draw Sal's path.

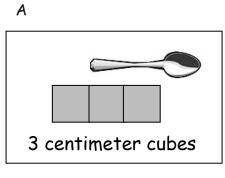
Circle the correct word to make the statement true.

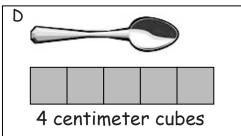
- 8. Cam's path is longer/shorter than Sal's path.
- 9. Who took the shortest path to the beach?
- 10. Order the paths from shortest to longest.

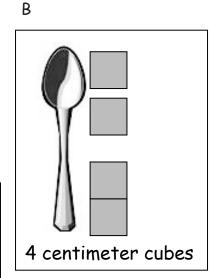
| | | |
|-------------|-------------|--|

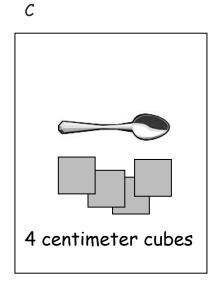
| Name | _ | Date | |
|---|------------------------|--------------|--|
| Measure the length of each pic Complete the statements below | cture with your cubes. | 1 5 | |
| 1. The lollipop is centi | meter cubes long. | } | |
| 2. The stamp is centing | meter cubes long. | 2 | |
| 3. The purse is centing | neter cubes long. | | 5: |
| 4. The candle is centil | meter cubes long. | | → |
| 5. The bow is centime | ter cubes long. | | |
| 6. The cookie is centil | meter cubes long. | | |
| 7. The mug is centime | ter cubes long. | 1 | Praerica a contract of the con |
| 8. The ketchup is about | centimeter cubes lon | lg. Retthin | Company and court for short interest and short in |
| 9. The envelope is about | centimeter cubes lo | ng. | \longleftrightarrow |

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





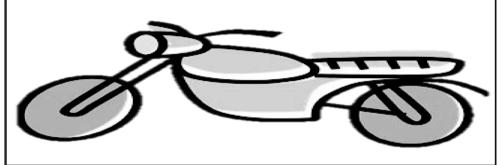


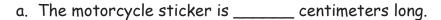


11. Explain what is wrong with the measurements for the pictures you did NOT circle.

| Name | Date | |
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|------|------|--|

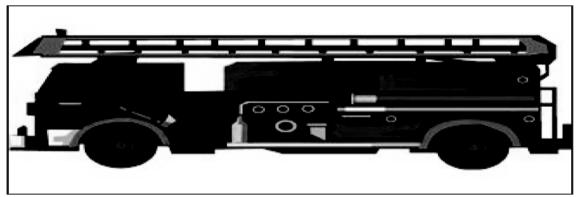
1. Justin collects stickers. Use centimeter cubes to measure Justin's stickers. Complete the sentences about Justin's stickers.



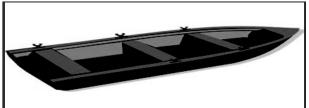




b. The car sticker is ____ centimeters long.



c. The fire truck sticker is _____ centimeters long.



d. The row boat sticker is ____ centimeters long.



e. The airplane sticker is _____ centimeters long.

| 2. | Use the stickers' measurements to order the stickers of the fire truck, the row |
|----|---|
| | boat, and the airplane from longest to shortest. You can use drawings or names to |
| | order the stickers. |

Longest

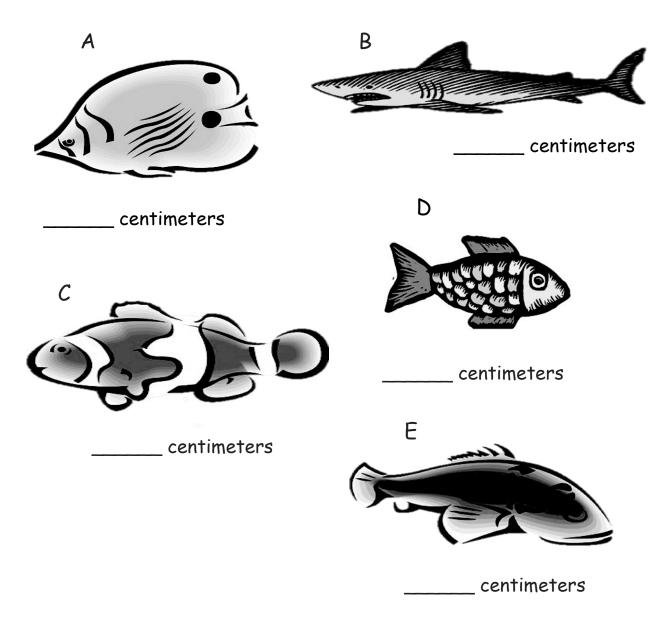
Shortest

- 3. Fill in the blanks to make the statements true. (There may be more than one correct answer.)
 - a. The airplane sticker is longer than the _____ sticker.
 - b. The row boat sticker is longer than the _____ sticker and shorter than the _____ sticker.
 - c. The motorcycle sticker is shorter than the ______ sticker and longer than the _____ sticker.
 - d. If Justin gets a new sticker that is longer than the row boat, it will also be

longer than which of his other stickers?

| Vame | Date |
|------|------|
|------|------|

1. Natasha's teacher wants her to put the fish in order from longest to shortest. Measure each fish with the centimeter cubes that your teacher gave you.



2. Order fish A, B, and C from longest to shortest.



| 3. l | Use all of | the fis | n measurements | to complete | the sentences. |
|------|------------|---------|----------------|-------------|----------------|
|------|------------|---------|----------------|-------------|----------------|

a. Fish A is longer than Fish _____ and shorter than Fish _____.

b. Fish C is shorter than Fish _____ and longer than Fish _____.

c. Fish _____ is the shortest fish.

d. If Natasha gets a new fish that is shorter than Fish A, list the fish that the new fish is also shorter than.

Use your centimeter cubes to model each length, and answer the question.

4. Henry gets a new pencil that is 19 centimeters long. He sharpens the pencil several times. If the pencil is now 9 centimeters long, how much shorter is the pencil now than when it was new?

5. Malik and Jared each found a stick at the park. Malik found a stick that was 11 centimeters long. Jared found a stick that was 17 centimeters long. How much longer was Jared's stick?

| Name | Date | <u> </u> |
|-------------------------------------|--|---------------|
| | sure the length of each object with the large pape the length with the small paper clips on the back. | r I I I |
| 1. Fill in the chart on the back of | the page with your measurements. | |
| Paintbrush | | |
| Scissor | | |
| Scissor | Glue | |
| | | |
| Eraser | Crayon | |
| | | |
| 1 | | |

| Name of Object | Length in Large Paper Clips | Length in Small Paper Clips |
|--|--------------------------------|--------------------------------|
| a. paintbrush | | |
| b. scissors | | |
| c. eraser | | |
| d. crayon | | |
| e. glue | | |
| 2. Find objects around your home to and their measurements on the ch | | objects you find |

| Nam | e of Object | Length in Large Paper Clips | Length in Small Paper Clips |
|-----|-------------|--------------------------------|--------------------------------|
| a. | | | |
| b. | | | |
| c. | | | |
| d. | | | |
| e. | | | |

| Name | | Date | |
|--|--------------|--------------------------|------------------|
| Circle the length unit you will use to | o measure. U | Jse the same length unit | for all objects. |
| Small Paperclips | | Large Paperclips | |
| | | | |
| Too | othpicks | Centim | eter Cubes |
| | | | |

1. Measure each object listed on the chart and record the measurement. Add the names of other objects in your house and record their measurements.

| Home Object | Measurement |
|------------------|-------------|
| a. fork | |
| b. picture frame | |
| c. pan | |
| d. shoe | |

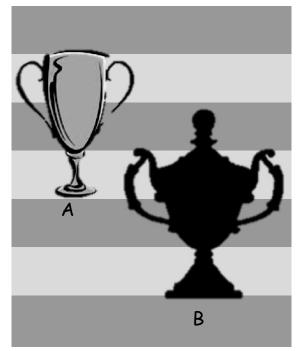
| Home Object | Measurement |
|-------------------|-------------|
| e. stuffed animal | |
| | |
| | |
| , | |
| f. | |
| | |
| | |
| | |
| g. | |
| | |
| | |
| | |

Did you remember to add the name of the length unit after the number? Yes No

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

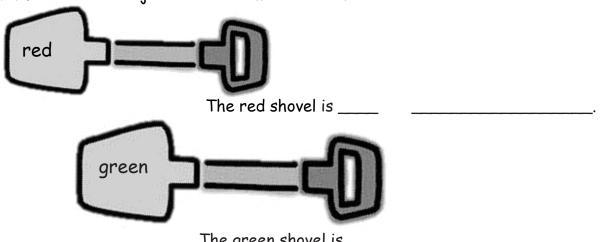
| Name | Date |
|------|------|
| | |

1. Look at the picture below. How much shorter is Trophy A than Trophy B?



Trophy A is _____ units shorter than Trophy B.

2. Measure each object with centimeter cubes.



The green shovel is _____

3. How much longer is the green shovel than the red shovel?

The green shovel is ____ centimeters longer than the red shovel.

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

4. Susan grew 15 centimeters, and Tyler grew 11 centimeters. How much more did Susan grow than Tyler?

5. Bob's straw is 13 centimeters long. If Tom's straw is 6 centimeters long, how much shorter is Tom's straw than Bob's straw?

6. A purple card is 8 centimeters long. A red card is 12 centimeters long. How much longer is the red card than the purple card?

7. Carl's bean plant grew to be 9 centimeters tall. Dan's bean plant grew to be 14 centimeters tall. How much taller is Dan's plant than Carl's plant?

| Na | me | D | ate | | |
|----|---|---------------------------------------|------------------------------------|--|--|
| | udents were asked ab swer the questions. | oout their favorite ice cream flavor. | Use the data below to | | |
| | Ice Cream Flavor | Tally Marks | Votes | | |
| | Chocolate | | | | |
| | Strawberry | | | | |
| | Cookie Dough | ### | | | |
| 2. | Fill in the blanks in the table by writing the number of students who voted for each flavor. How many students chose cookie dough as the flavor they like best? students What is the total number of students who like chocolate or strawberry the best? students | | | | |
| 4. | Which flavor receive | ed the least amount of votes? | | | |
| 5. | What is the total nu students | mber of students who like cookie do | ough or chocolate the best? | | |
| 6. | . Which two flavors were liked by a total of 7 students? | | | | |
| | | and | | | |
| 7. | . Write an addition sentence that shows how many students voted for their favorite ice cream flavor. | | | | |

Students voted on what they like to read the most. Organize the data using tally marks, and then answer the questions.

| comic book | magazine cl | hapter book | comic book | magazine |
|--------------|--------------|-------------|--------------|--------------|
| chapter book | comic book | comic book | chapter book | chapter book |
| chapter book | chapter book | magazine | magazine | magazine |

| What Students Like to Read the Most | Number of Students |
|-------------------------------------|--------------------|
| Comic Book | |
| Magazine | |
| Chapter Book | |

- 8. How many students like to read chapter books the most? ____ students
- 9. Which item received the least amount of votes?
- 10. How many more students like to read chapter books than magazines?

_____ students

- 11. What is the total number of students who like to read magazines or chapter books?

 students
- 12. Which two items did a total of 9 students like to read?

_____ and ____

13. Write an addition sentence that shows how many students voted.

| Na | me | | | Date | |
|----|-------------------------------------|--|--------------------|----------------------|---------------------|
| | lect informatio a in the chart l | n about things you below. | ı own. Use tally m | arks or numbers t | o organize the |
| | How many | How many | How many | How many | How many |
| | pets | toothbrushes | pillows | jars of tomato | picture frames |
| | do you have? | are in your | are in your | sauce | are in your |
| | | home? | home? | are in your home? | home? |
| | | | | | |
| | | | | | |
| | • | ne question senten r own questions. | ce frames to ask (| questions about yo | our data. |
| 1. | How many | do y | ou have? (Pick the | e item you have th | e most of.) |
| 2. | How many | do y | ou have? (Pick the | e item you have th | e least of.) |
| 3. | Together, how | many picture fran | nes and pillows do | you have? | |
| 4. | Write and answ | ver two more ques | tions using the da | ta you collected. | |
| | a | | | | |
| | | | | | |

Students voted on their favorite type of museum to visit. Each student could only vote once. Answer the questions based on the data in the table.

| Science Museum | |
|----------------|--|
| Art Museum | |
| History Museum | |

- 5. How many students chose art museums? _____ students
- 6. How many students chose the art museum or the science museum? ____students
- 7. From this data, can you tell how many students are in this class? Explain your thinking.

| Name | Date | |
|------|------|--|
| | | |

The class has 18 students. On Friday, 9 students wore sneakers, 6 students wore sandals, and 3 students were boots. Use squares with no gaps or overlaps to organize the data. Line up your squares carefully.

Shoes Worn on Friday

Number of Students

| Shoes | | |
|-------|---|--|
| | 3 | |

- 1. How many more students wore sneakers than sandals? _____ students
- 2. Write a number sentence to tell how many students were asked about their shoes on Friday.
- 3. Write a number sentence to show how many fewer students wore boots than sneakers.

Number of Vegetables

Our school garden has been growing for two months. The table below shows the numbers of each vegetable that have been harvested so far.

Vegetables Harvested

| beets | carrots | corn |
|-------|---------|-------|
| | | 6) 6) |

4. How many total vegetables were harvested?

5. Which vegetable has been harvested the most?

6. How many more beets were harvested than corn?

| more | beets | than | corr |
|-------------|-------|------|------|
| 11101 0 | 20010 | | |

7. How many more beets would need to be harvested to have the same amount as the number of carrots harvested?

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

School Lunch Order



= 1 student

| hot lunch | sandwich | salad |
|-----------|----------|-------|
| | | |

| 1. | How many more hot lunch orders were there than sandwich orders? |
|----|--|
| | more hot lunch orders |
| 2. | How many fewer salad orders were there than hot lunch orders? |
| | fewer salad orders |
| 3. | If 5 more students order hot lunch, how many hot lunch orders will there be? |
| | hot lunch orders |

Use the table to answer the questions. Fill in the blanks, and write a number sentence.

| | Favorite Type of Book | = 5 students |
|---------------|-----------------------|--------------|
| fairy tales | JHT JHT I | |
| science books | JHT 111 | |
| poetry books | M M M | |

| 4. How many more students like fairy tales than science book | 4. | How many | more students | like fairy | tales than | science | books |
|--|----|----------|---------------|------------|------------|---------|-------|
|--|----|----------|---------------|------------|------------|---------|-------|

more students

5. How many fewer students like science books than poetry books?

fewer students

6. How many students picked fairy tales or science books in all?

____students

7. How many more students would need to pick science books to have the same number of books as fairy tales?

____students

8. If 5 more students show up late and all pick fairy tales, will this be the most popular book? Use a number sentence to show your answer.









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