

## Understand Estimating Length

Name: \_\_\_\_\_

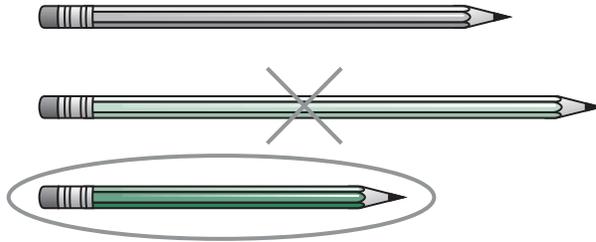
**Prerequisite: How do you order objects by length?**



**Study the example showing how to compare and order objects by length. Then solve Problems 1–8.**

### Example

- Circle the shortest pencil.
- Draw an X on the longest pencil.



Circle the word that makes the sentence below true.

The top pencil is **longer** / **shorter** than the middle pencil.

**Use the crayons for Problems 1–3.**

- 1 Circle the shortest crayon.
- 2 Draw an X on the longest crayon.
- 3 Circle the word that makes the sentence below true.



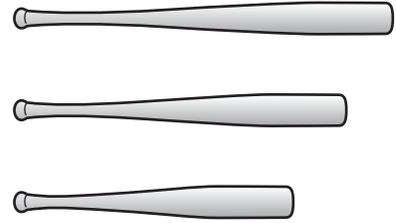
The top crayon is **longer** / **shorter** than the middle crayon.



**Solve.**

**Use the bats for Problems 4–6.**

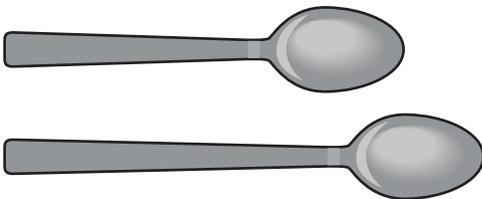
- 4 Circle the shortest bat.
- 5 Draw an X on the longest bat.
- 6 Circle the word that makes the sentence below true.  
The bottom bat is **longer** / **shorter** than the middle bat.



- 7 Draw a line that is longer than both rectangles.



- 8 Draw a line that is shorter than both spoons.



## Use Different Units to Estimate Length

Study the example showing how to estimate length. Then solve Problems 1–8.

**Example**

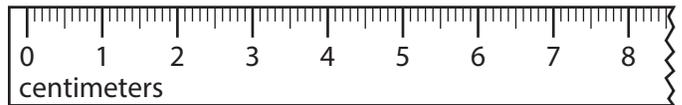
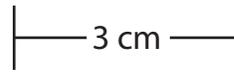
Use the paper clip to estimate the length of the yarn.

- It looks like about 2 paper clips would fit above the yarn.

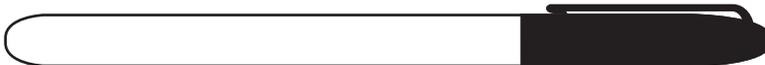
**Estimate:** about 6 cm

Then use the ruler to measure the actual length of the yarn.

**Actual length:** 7 cm

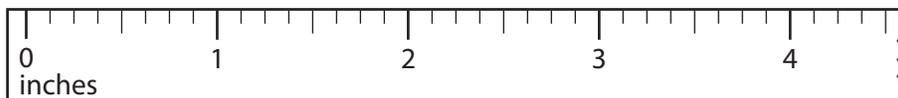
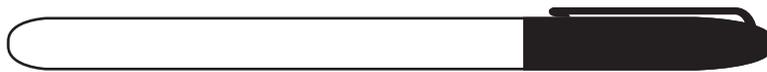


- 1** Use the eraser to estimate the length of the marker.



The marker is about \_\_\_\_\_ inches long.

- 2** Use the ruler to find the actual length of the marker.



What is the actual length?  
\_\_\_\_\_ inches

**Vocabulary**

**to estimate** use math thinking to make a close guess.

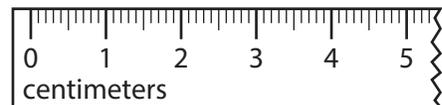
**estimate** a close guess made using math thinking.

## Solve.

- 3 Use the width of your little finger to estimate the length of the sticker.  
The sticker is about \_\_\_\_\_ cm long.



- 4 Use the centimeter ruler to measure the length of the sticker.  
What is the actual length? \_\_\_\_\_ cm

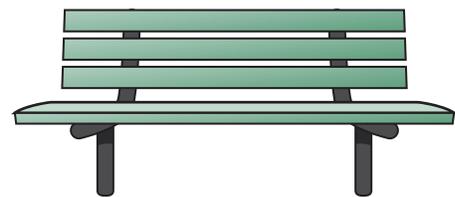


- 5 Estimate the height of your front door in feet.  
\_\_\_\_\_ feet

- 6 Estimate the length of a wall in your home in meters.  
\_\_\_\_\_ meters

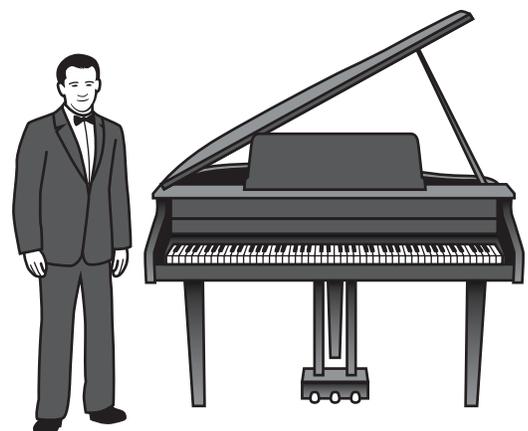
- 7 Which is the best estimate for the length of a park bench?

10 inches      24 meters      2 yards



- 8 Which is the best estimate for the length of a piano keyboard?

12 inches      5 feet      20 yards



## Reason and Write

Look at the example. Underline a part that you think makes it a good answer.

## Example

Mrs. Chen made a list of lengths.

## Mrs. Chen's List

Item	Length
unsharpened pencil	19 centimeters
sticky note	3 inches
egg carton	1 foot
height of door	2 meters

- Choose an object in your home that is not on the list.
- Estimate the length of the object you chose. Think about an item from Mrs. Chen's list to help you make your estimate.
- Explain how you made your estimate.

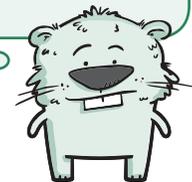
Object: poster Estimate: 3 feet

Explain.

**I thought about the egg carton from Mrs. Chen's list. The length of an egg carton is 1 foot. My poster looks as long as about 3 egg cartons.  $1 + 1 + 1 = 3$ , so the poster is about 3 feet long.**

Where does the example ...

- tell the object that was chosen?
- show the estimate?
- explain which item from Mrs. Chen's list was used for help?
- explain how the estimate was made?



**Solve the problem. Use what you learned from the example.**

Mrs. Chen made a list of lengths.

**Mrs. Chen's List**

Item	Length
unsharpened pencil	19 centimeters
sticky note	3 inches
egg carton	1 foot
height of door	2 meters

- A. Choose an object in your home that is not on the list.
- B. Estimate the length of the object you chose. Think about an item from Mrs. Chen's list to help you make your estimate.
- C. Explain how you made your estimate.

Object: \_\_\_\_\_ Estimate: \_\_\_\_\_

Explain.

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Where did you...

- write the object you chose?
- write your estimate?
- explain which item from Mrs. Chen's list you thought about to help you?
- explain how you made your estimate?

