

Measuring and Estimating Length: practice solutions, Grade 2 – download the PDF

Written solutions to the chapter problems. Check each step, then correct yourself.

1 Choose the best unit



- a. A bean is tiny, so use **centimeters**.
- b. A hallway is long, so use **feet**.
- c. A playground is very wide, so use **meters**.
- d. A notebook is small, so use **inches**.

2 Read the ruler



The marker starts at 0 and ends at the 6 mark. Each step is 1 inch.

The marker is 6 inches long.

3 A strip that does not start at 0



The strip starts at 3 and ends at 8. Subtract: $8 - 3 = 5$.

The paper strip is 5 centimeters long. (If you said 8, you forgot that it did not start at 0.)

4 Matching units



- a. 1 foot = 12 inches
- b. 1 meter = 100 centimeters
- c. 1 yard = 3 feet
- d. 2 feet is two groups of 12 inches: $12 + 12 = 24$, so 2 feet = 24 inches.

5 Which is longer?



- a. 1 foot is 12 inches and $12 > 8$, so 1 foot is longer.
- b. 2 feet is 24 inches and $24 > 20$, so 2 feet is longer.

6 Pick the tool



- a. A pencil is short: use a ruler.
- b. A classroom is wide: use a measuring tape.
- c. A bookshelf about 3 feet tall is the length of a yardstick: use a yardstick.

7 True or false?



- a. **True.** A foot is 12 inches.
- b. **False.** A meter stick is about 39 inches, a little longer than a yardstick (36 inches).
- c. **True.** That is the definition of a meter.
- d. **True.** A centimeter is a small unit, so you need a bigger number of them.

8

Same desk, two units

2 feet is 24 inches, because $12 + 12 = 24$. Lena gets **2 feet**.

The number is smaller because a foot is a longer unit than an inch, so you need fewer of them.

9

Who guessed best?

Mia: $10 - 8 = 2$ inches away. Leo: $11 - 10 = 1$ inch away.

Leo's estimate was closer, because 1 is less than 2.

10

Joining ribbons

Add the lengths: $15 + 28 = 43$.

The new ribbon is 43 centimeters long.

11

Cutting a rope

Subtract: $45 - 18 = 27$.

The rope is now 27 inches long.

12

Red and blue yarn

a. $52 - 36 = 16$. The red yarn is **16 centimeters longer**.

b. $36 + 52 = 88$. Together they are **88 centimeters** long.

13**The frog jump**

Start at 0, hop 25, then hop 14 more: $25 + 14 = 39$.

The frog lands at 39 inches.

14**Reading a line plot**

- a. There are 3 Xs above 6, so **3 plants**.
- b. Above 7 there are 2 Xs, above 8 there is 1 and above 9 there is 1: $2 + 1 + 1 = 4$. **4 plants**.
- c. The tallest is 9 inches and the shortest is 4 inches: $9 - 4 = 5$. **5 inches taller**.
- d. $1 + 2 + 3 + 2 + 1 + 1 = 10$. **10 plants** were measured.

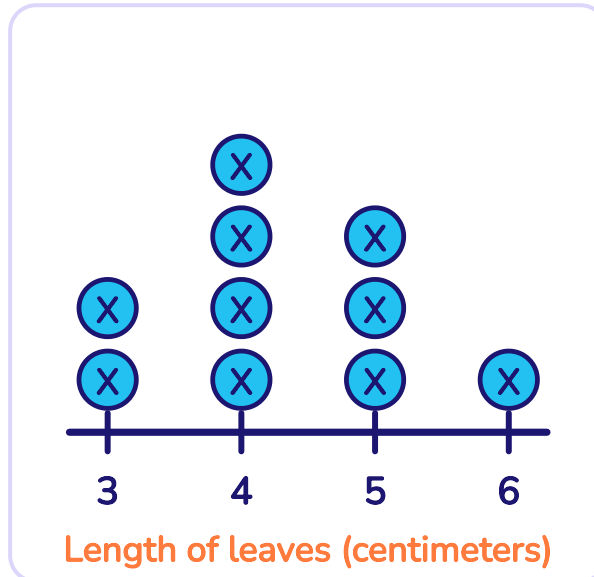
15 Make a line plot

★★★

a. 3 cm: 2 leaves, 4 cm: 4 leaves, 5 cm: 3 leaves, 6 cm: 1 leaf. Check:

$$2 + 4 + 3 + 1 = 10.$$

b. Draw a number line from 3 to 6, then put 2 Xs above 3, 4 Xs above 4, 3 Xs above 5 and 1 X above 6. Add the unit under the line.



c. The tallest stack is above 4, so the most common length is **4 centimeters**.

d. $3 + 1 = 4$, so **4 leaves** are 5 centimeters or longer.

16 Building a fence

★★★

a. $24 + 24 + 17 = 65$. The fence was **65 inches** long.

b. $90 - 65 = 25$. The fourth board is **25 inches** long.

17 Jumping contest

★★★

Change feet to inches: $3 \times 12 = 36$, or $12 + 12 + 12 = 36$. Maya jumped 36 inches.

Compare: $36 > 30$, and $36 - 30 = 6$.

Maya jumped farther, by 6 inches.

18 Three snakes



- a. 58, 66, 74. The order is **58 cm, 66 cm, 74 cm**.
- b. $74 - 58 = 16$. The longest snake is **16 centimeters** longer.

19 Find the mistake



Sam read only the end mark. The pencil did not start at 0.

The correct length is $8 - 1 = 7$, so the pencil is **7 inches** long.

20 Two scarves



- a. $87 - 29 = 58$. The blue scarf is **58 centimeters** long.
- b. $87 + 58 = 145$. Together they are **145 centimeters** long.

21 The one-meter ribbon



1 meter is 100 centimeters. The two pieces together are $35 + 28 = 63$ centimeters.

$100 - 63 = 37$. **37 centimeters** of ribbon are left.



Test yourself: quick challenge for Grade 2

[Change level](#)

Level : **Grade 2**

6 random questions, instant feedback.



Start the challenge

 Keep exploring with Zyro

 Math practice

Measuring and Estimating Length: math practice, Grade 2

 Math quizzes

Measuring and Estimating Length: math quiz, Grade 2

 Math tests

Measuring and Estimating Length: math test, Grade 2

 Math practice

Data, Graphs and Line Plots: math practice, Grade 2

 Math practice

Shapes, Arrays and Equal Parts: math

 Math quizzes

Data, Graphs and Line Plots: math quiz,

Zyro vous emmène sur nos sites partenaires

Embarquez pour d'autres planètes du savoir et leurs applis.

Décollage