LESSON MAKER PRO

Cube Measure Quest

Count unit cubes to find length.

GRADE 2 · TEKS 2.9.A

2.9.A "find the length of objects using concrete models for standard units of length;"

NAME _____ DATE _____

MEASURE WITH CUBES

Place same-size unit cubes end to end with no gaps or overlaps. Count the cubes, then name the unit, such as inches or centimeters.

WORKED EXAMPLE

A paintbrush is lined up with 8 centimeter cubes. How long is the paintbrush?

1. The cubes touch end to end.
2. Count the cubes: 1, 2, 3, 4, 5, 6, 7, 8.
3. Each cube is 1 centimeter long.

Answer: 8 centimeters

PRACTICE 5 problems

1 A toy car is lined up with 4 inch cubes. How long is the toy car?

ANSWER _____

2 A caterpillar sticker is lined up with 6 centimeter cubes. How long is the sticker?

ANSWER _____

3 A snack bar is lined up with 2 inch cubes. How long is the snack bar?

ANSWER _____

4 A toy fish is lined up with 5 centimeter cubes. How long is the toy fish?

ANSWER _____

5 A picture book is lined up with 7 inch cubes. How long is the book?

ANSWER _____

APPLY IT Show your work

1 At the pet store, a small dog toy is lined up with 3 inch cubes. How long is the dog toy?

WORK SPACE

ANSWER _____

2 At art time, a paper strip covers 9 centimeter cubes. How long is the paper strip?

WORK SPACE

ANSWER _____

3 Your teacher supplies twelve cubes with edges exactly 1 centimeter long and an unmarked paper strip whose length is a whole number of centimeters from 4 to 10. Place the cubes in a straight row along the strip, starting at one end with no gaps or overlaps. Find the length from your own cube count. Record the strip length and unit, draw your arrangement and show your teacher how both ends line up.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Leo measures a toy snake with 5 centimeter cubes, but he leaves a space between two cubes. Can he say the snake is 5 centimeters long? Explain.

WORK SPACE AND ANSWER

ANSWER KEY

Cube Measure Quest

GRADE 2 · TEKS 2.9.A

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A toy car is lined up with 4 inch cubes. How long is the toy car?	**4 inches**
2	A caterpillar sticker is lined up with 6 centimeter cubes. How long is the sticker?	**6 centimeters**
3	A snack bar is lined up with 2 inch cubes. How long is the snack bar?	**2 inches**
4	A toy fish is lined up with 5 centimeter cubes. How long is the toy fish?	**5 centimeters**
5	A picture book is lined up with 7 inch cubes. How long is the book?	**7 inches**

PART 2 · APPLY IT

1. **3 inches** Count the 3 inch cubes. The dog toy is 3 inches long.
2. **9 centimeters** Count the 9 centimeter cubes. The paper strip is 9 centimeters long.
3. **Answers vary: the actual strip length is the counted number of 1-centimeter cubes, in centimeters.** Prepare the strip and verified 1-centimeter cubes before the task; ordinary linking cubes are not automatically 1 centimeter wide. Observe endpoint alignment, touching cubes and complete coverage. For example, a 7-centimeter strip uses 7 cubes and measures 7 cm. Check the actual measurement, unit and matching sketch rather than accepting a supplied count.

CHALLENGE

No. The cubes must touch end to end with no gaps before he counts them.

Accept inches or in., and centimeters or cm. For the challenge, accept an explanation that says unit cubes must touch with no gaps or overlaps. For Apply 3 provide the real standard-unit cubes and prepared strip, and inspect the child's placement/count. Read directions or scribe as needed.