LESSON MAKER PRO

Length Difference Detectives

Find how much longer one object is than another.

GRADE 2 · 2.MDR.5.3

2.MDR.5.3 "Measure to determine how much longer one object is than another and express the length difference in terms of a standard-length unit."

NAME _____ DATE _____

FIND THE DIFFERENCE

First, find the longer object. Subtract the shorter length from the longer length, and write the answer with the unit.

WORKED EXAMPLE

A toy train is 11 cm long. A toy boat is 5 cm long. How much longer is the train?

1. The train is longer: 11 cm.
2. Subtract: 11 - 5 = 6.
3. The train is 6 cm longer.

Answer: 6 cm

PRACTICE 5 problems

1 A teddy bear is 9 cm tall. A doll is 6 cm tall. How much taller is the teddy bear?

ANSWER _____

2 A pencil is 13 cm long. A crayon is 10 cm long. How much longer is the pencil?

ANSWER _____

3 A toy fish is 15 cm long. A toy snail is 8 cm long. How much longer is the fish?

ANSWER _____

4 One block tower is 16 cm tall. Another block tower is 12 cm tall. How much taller is the first tower?

ANSWER _____

5 A jump rope is 18 cm long. A toy leash is 14 cm long. How much longer is the jump rope?

ANSWER _____

APPLY IT Show your work

1 At art time, Maya has a paper strip that is 17 cm long. Her friend's strip is 9 cm long. How much longer is Maya's strip?

WORK SPACE

ANSWER _____

2 Leo has a blue ribbon that is 20 cm long and a yellow ribbon that is 13 cm long. How much longer is the blue ribbon?

WORK SPACE

ANSWER _____

3 Measure two paper strips with a centimeter ruler. Your teacher provides strips A and B cut to different whole-centimeter lengths but does not tell you their lengths. Align each strip end with zero, read its other endpoint, and record A = __ cm and B = __ cm. Subtract the shorter measurement from the longer. Which strip is longer, and by how many centimeters? Show your readings and subtraction.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Three toy snakes are 19 cm, 16 cm, and 11 cm long. How much longer is the longest snake than the shortest snake? Explain how you know.

WORK SPACE AND ANSWER

ANSWER KEY

Length Difference Detectives

GRADE 2 · 2.MDR.5.3

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A teddy bear is 9 cm tall. A doll is 6 cm tall. How much taller is the teddy bear?	**3 cm**
2	A pencil is 13 cm long. A crayon is 10 cm long. How much longer is the pencil?	**3 cm**
3	A toy fish is 15 cm long. A toy snail is 8 cm long. How much longer is the fish?	**7 cm**
4	One block tower is 16 cm tall. Another block tower is 12 cm tall. How much taller is the first tower?	**4 cm**
5	A jump rope is 18 cm long. A toy leash is 14 cm long. How much longer is the jump rope?	**4 cm**

PART 2 · APPLY IT

1. **8 cm** Subtract the shorter strip from the longer strip: 17 - 9 = 8. Maya's strip is 8 cm longer.
2. **7 cm** Subtract the yellow ribbon length from the blue ribbon length: 20 - 13 = 7. The blue ribbon is 7 cm longer.
3. **Answers depend on the measured strips; record both lengths in cm and the nonnegative difference, identifying the longer strip.** Before class, prepare two different whole-centimeter paper strips within the ruler range and verify their lengths. Observe zero alignment and endpoint readings; check the recorded measurements and difference against the actual strips. If strips measure 17 cm and 9 cm, the difference is 8 cm; students must measure, not copy those example values.

CHALLENGE

8 cm. The longest snake is 19 cm, and the shortest snake is 11 cm. 19 - 11 = 8.

Accept answers that include the correct number and unit, cm. For the challenge, accept a correct explanation that identifies 19 cm as longest and 11 cm as shortest and subtracts to find 8 cm. For Apply 3, supply the actual strips and ruler, withhold lengths until measured, and observe ruler use. Accept accessible supported ruler use or an equivalent usable measurement display with independently read endpoints; subtraction alone is not the complete measuring task.