LESSON MAKER PRO

# Length Difference Detectives

*Measure in one unit, then find how much longer.*

**GRADE 2 · MA.2.M.1.2**

**MA.2.M.1.2** "Measure the lengths of two objects using the same unit and determine the difference between their measurements."

NAME _____ DATE _____

## FIND THE DIFFERENCE

Measure both objects with the same unit. Subtract the shorter length from the longer length to find how much longer one object is.

## WORKED EXAMPLE

A robot is 8 link cubes long. A drum is 3 link cubes long. How much longer is the robot?

1. Both lengths use link cubes.
2. Start with the longer length: 8 link cubes.
3. 8 - 3 = 5.
4. The robot is 5 link cubes longer.

**Answer: 5 link cubes**

## PRACTICE 5 problems

**1** A toy car is 7 cubes long. A toy truck is 6 cubes long. How much longer is the toy car?

**ANSWER** _____

**2** A red ribbon is 6 paper clips long. A blue ribbon is 4 paper clips long. How much longer is the red ribbon?

**ANSWER** _____

**3** A book is 9 blocks long. A notebook is 7 blocks long. How much longer is the book?

**ANSWER** _____

**4** A toy snake is 6 tiles long. A toy lizard is 2 tiles long. How much longer is the toy snake?

**ANSWER** _____

**5** A pencil is 9 cubes long. A crayon is 7 cubes long. How much longer is the pencil?

**ANSWER** _____

## APPLY IT Show your work

**1** Maya measures her jump rope with paper clips. Her jump rope is 9 paper clips long. Her brother's jump rope is 7 paper clips long. How much longer is Maya's jump rope?

WORK SPACE

**ANSWER** _____

**2** At a pet store, a hamster tunnel is 6 blocks long. A rabbit tunnel is 2 blocks long. How much longer is the hamster tunnel?

WORK SPACE

**ANSWER** _____

**3** Measure and compare. Your teacher provides a pencil, a crayon, and a centimeter ruler. Measure both objects from zero to the nearest centimeter with the same ruler. Record both lengths. Which is longer? Write a longer-minus-shorter equation and the difference in centimeters.

WORK SPACE

**ANSWER** _____

## CHALLENGE One step up

A yellow scarf is 9 cubes long. A green scarf is 7 cubes long. A purple scarf is 4 cubes long. Which two scarves have a difference of 2 cubes?

WORK SPACE AND ANSWER

**ANSWER KEY**

# Length Difference Detectives

**GRADE 2 · MA.2.M.1.2**

## PART 1 · PRACTICE

| # | PROBLEM | ANSWER |
|---|---|---|
| 1 | A toy car is 7 cubes long. A toy truck is 6 cubes long. How much longer is the toy car? | **1 cube** |
| 2 | A red ribbon is 6 paper clips long. A blue ribbon is 4 paper clips long. How much longer is the red ribbon? | **2 paper clips** |
| 3 | A book is 9 blocks long. A notebook is 7 blocks long. How much longer is the book? | **2 blocks** |
| 4 | A toy snake is 6 tiles long. A toy lizard is 2 tiles long. How much longer is the toy snake? | **4 tiles** |
| 5 | A pencil is 9 cubes long. A crayon is 7 cubes long. How much longer is the pencil? | **2 cubes** |

## PART 2 · APPLY IT

1. **2 paper clips** Subtract the shorter jump rope length from the longer length. 9 - 7 = 2 paper clips.
2. **4 blocks** Subtract the rabbit tunnel length from the hamster tunnel length. 6 - 2 = 4 blocks.
3. **Results vary. Both actual lengths and the difference must use centimeters; equal lengths have a difference of zero.** Observe the learner measure both objects with the same unit and align each with zero. Check the two readings and subtraction against the actual objects; accept either longer object or equal lengths.

## CHALLENGE

**The yellow scarf and the green scarf.**

Accept answers that state the difference and the correct unit. Students may show a subtraction equation or count up from the shorter length to the longer length.