

Chapter 8
Lesson 1

Measuring Length in Millimetres


You will need

- a ruler marked in millimetres
- a metre stick
- a paper clip

GOAL

Measure length using millimetres.

Mateo is making a rain gauge. He wonders what measurements he should mark on the side.

 **How can you mark a rain gauge for measuring rainfall?**



Mateo's Rain Gauge

Where I live, the greatest rainfall for any month last year was 84 **mm (millimetres)**.

The smallest marks on my ruler are millimetres. I can't label all the millimetres from 1 to 84 on my rain gauge because millimetres are too close together. I'll just mark the centimetres.



millimetre (mm)

A unit of length that is about the thickness of a dime

For example, this paper clip is 27 mm long.



10 mm = 1 cm

- A.** Draw a line that is 84 mm long. About how many whole centimetres long is your line?



- B.** Draw marks along your line to show the centimetres. Remember that $10\text{ mm} = 1\text{ cm}$.
- C.** How do you know that 84 mm is almost 8.5 cm ?
- D.** How can you rename your centimetre markings as millimetres for measuring the rain?



Reflecting

- E.** Remember that there are 100 cm in 1 m . How many millimetres are in 1 m ? How do you know?



- F.** How could adding millimetre marks between the centimetre marks on his rain gauge help Mateo measure more accurately?

August Rainfall

City	Rainfall (mm)
Vancouver	38
Calgary	49
Regina	40
Iqaluit	64

Checking

- 1.** Normal August rainfall for some Canadian cities is shown in the chart. Draw a line to represent each height.

Practising

- 2.** Measure the length of a paper clip in millimetres. Use the paper clip to estimate the following lengths:
- the thickness of your math book
 - the height of an eraser
- 3.** Use a ruler to measure each length you estimated for Question 2.
- 4.** Maya measured an object. It was 520 mm long.
- Is the object longer or shorter than your ruler?
 - How many centimetres long is the object?
 - How do you know that it is about 0.5 m long?
 - What object could be 520 mm long?
- 5.** Why are long lengths, such as the length of your classroom, not usually measured in millimetres?