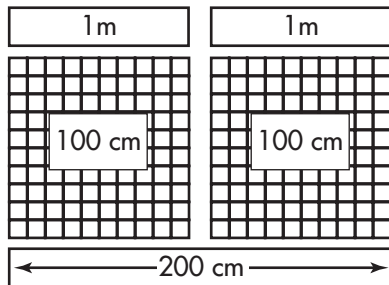


# Converting Metric Units of Length

**How to change a length measurement from one metric unit to another:**

Converting a length from a smaller to a larger metric unit

200 centimeters = \_\_\_\_\_ meters



**Think:** If I measure the same length using a larger unit, I will need a smaller number of units.

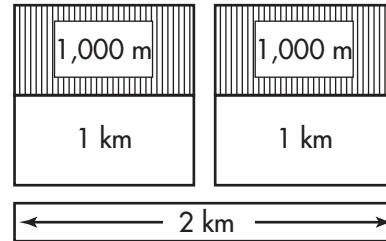
**Operation:** Divide.

You know  $100 \text{ cm} = 1 \text{ m}$ .

Find  $200 \div 100$ ;  $200 \text{ cm} = 2 \text{ m}$

Converting a length from a larger to a smaller metric unit

2 kilometers = \_\_\_\_\_ meters



**Think:** If I measure the same length using a smaller unit, I will need a larger number of units.

**Operation:** Multiply.

You know  $1 \text{ km} = 1,000 \text{ m}$ .

Find  $2 \times 1,000$ ;  $2 \text{ km} = 2,000 \text{ m}$

Relationships Among Metric Units of Length						
Kilometer			Meter		Centimeter	Millimeter
1 km	=		1,000 m			
			1 m	=	100 cm	= 1,000 mm
					1 cm	= 10 mm

Complete.

- 80 mm = \_\_\_\_\_ cm
- 234 cm = \_\_\_\_\_ mm
- 2 m = \_\_\_\_\_ mm
- 14,000 mm = \_\_\_\_\_ m
- Which is shorter, 60 meters or 600 centimeters? \_\_\_\_\_
- Is 3.2 meters equal to 320 millimeters? Explain.