

UNIT #3 MEASUREMENT (PART 1)

- a system of measurements based on multiples of 10

SI system → "Système International d'Unités"

- internationally recognized

- Canada's measuring system

base unit: a unit of measurement on which other units are based ex. meter (m) is the base unit for measuring length

conversion factor: a # by which a quantity expressed in 1 unit must be multiplied to convert it to another unit.

SI (METRIC)	IMPERIAL
m	inch
Km	foot
mm	yard
cm	miles

Ex. #1

40 Km = _____ m

Ex. #1

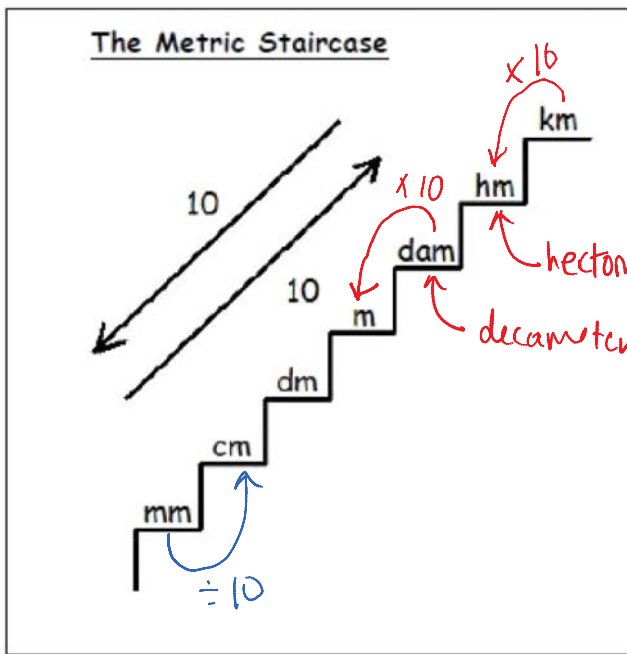
$$40 \text{ km} = \underline{\hspace{2cm}} \text{ m}$$

$$40 \cancel{\text{ km}} \times \frac{1000 \text{ m}}{1 \cancel{\text{ km}}} = \frac{40 \times 1000}{1} = \boxed{40,000 \text{ m}}$$

Ex. #2

$$9 \text{ m} = \underline{\hspace{2cm}} \text{ mm}$$

$$9 \cancel{\text{ m}} \times \frac{100 \cancel{\text{ cm}}}{1 \cancel{\text{ m}}} \times \frac{10 \text{ mm}}{1 \cancel{\text{ cm}}} = \frac{9 \times 100 \times 10}{1} = \boxed{9000 \text{ mm}}$$



Ex. #3

$$40 \text{ dam} = \underline{400} \text{ m}$$

$$40 \text{ dam} \times \frac{10 \text{ m}}{1 \text{ dam}} = 40 \times 10 = 400$$