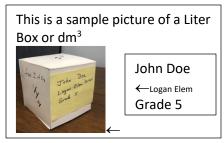
Add metric facts to the faces of your cubic decimeter. Some of the facts are: Consider the following headings for each of the six faces of your cubic decimeter (Liter)

LENGTH; MASS; VOLUME; TEMPERTATURE; HISTORY; THE SEVEN BASIC UNITS;

A cubic dm (dm³) filled with water at 4 $^{\circ}$ C will have a <u>mass</u> of 1 000 g or 1 kg. A cubic dm (dm³) filled with water at 4 $^{\circ}$ C will have a <u>capacity</u> of 1000 mL (milliliter) A name for the dm³ is liter (L). A named for the cm³ is milliliter (mL)

The basic unit of length is the meter (m).
Short lengths use millimeters (mm)
Clothing and body measurements use centimeters (cm)
Long distances use Kilometers (km)



←

10 mm = 1 cm; 1 dm (decimeter) = 10 cm; 100 cm = 1 m; 1000 m = 1 km

Foods and packaged goods are measured in grams (g) and kilograms (kg)

1 000 mg (milligram) = 1 g (gram); 1 000 g = 1 kg (kilogram); 1 000 kg = 1 t (metric ton)

The 10 cm Cube has a volume of 1 000 cm³ (cubic centimeters)

If you fill the 10 cm Cube full of water, we have 1 L (liter) of water or 1 000 mL of water. And the 10 cm Cube full of water would have a mass of 1 kg (kilogram)

Definition: a cm³ (centimeter cube) filled brim full of water at 4 °C has a mass of 1 g. Thus a liter or dm³ full of water has a mass of 1 000 g or 1 kg and a m³ (about the size of the box your washing machine would be packed in) has a mass of 1 000 kg or 1 t (1 t = 1 000 kg a metric ton)

"Water" $cm^3 \leftrightarrow 1 g$; $dm^3 \leftrightarrow 1 kg$; $m^3 \leftrightarrow 1 t$ "Beautiful!!"

100 °C water boils; 37 °C is normal body temperature; 21 °C is room temperature; 28 °C is beach weather! 0 °C water freezes

The unit of Volume I the cubic meter (m³) The liter (L) is a special unit for the measurements of liquids. A solid the size of this 10 cm Cube would have a volume of 1000 cm³, but liquid filling this 10 cm Cube would have a volume of 1 L (or 1 000 mL).

The Cubic meter (m^3) is preferred for larger volumes such as fluids in large storage tanks. 1 L (liter) = 1 000 mL (millimeter) = 1 d m^3 (cubic decimeter) SPEED will be in km/h (kilometers per hour)

The four Main Reason "Why Metric is preferred"

- 1. The SI Metric System Was Scientifically Developed
- 2. Ease of Computation
- 3. Economic & Trade Reasons
- 4. This is a METRIC WORLD (Universal language of measurement)