



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; TEMPERATURE; HISTORY; THE SEVEN BASIC UNITS;

A cubic dm (dm^3) filled with water at 4°C will have a mass of 1 000 g or 1 kg.

A cubic dm (dm^3) filled with water at 4°C will have a capacity of 1000 mL (milliliter)

A name for the dm^3 is liter (L). A name for the cm^3 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)

This is a sample picture of a Liter
Box or dm^3



John Doe
← Logan Elem
Grade 5

←

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 cm^3 (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 cm^3 (centimeter cube) filled brim full of water at 4°C has a mass of 1 g.

Thus a liter or dm^3 full of water has a mass of 1 000 g or 1 kg and a m^3 (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” $\text{cm}^3 \leftrightarrow 1 \text{ g}$; $\text{dm}^3 \leftrightarrow 1 \text{ kg}$; $\text{m}^3 \leftrightarrow 1 \text{ t}$ “Beautiful!!”

100 $^\circ\text{C}$ water boils; 37 $^\circ\text{C}$ is normal body temperature; 21 $^\circ\text{C}$ is room temperature;

28 $^\circ\text{C}$ is beach weather! 0 $^\circ\text{C}$ water freezes

The unit of Volume is the cubic meter (m^3) 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 cm^3** , 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 (milliliter) = 1 dm^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)