

To successfully convert units, remember

$$10 \text{ cm} = 1 \text{ dm}$$

$$100 \text{ cm} = 1 \text{ m}$$

$$1000 \text{ kg} = 1 \text{ t}$$

$$1 \text{ cnt} = 100 \text{ kg}$$

$$1 \text{ t} = 1000 \text{ kg}$$

Base units are represented with a single symbol.

meter

m

gram

g

liter

l

are

a

To express very large or very small numeric values, directly to the name of a unit is attached prefix:

milli-	1000 times smaller	1 g=1000 mg (1 gram is 1000 milligrams)
centi-	100 times smaller	1 m=100 cm (1 meter is 100 centimeters)
deci-	10 times smaller	1 m=10 dm (1 meter is 10 decimeters)
deca-	10 times bigger	1 dal=10 l (1 decaliter is 10 liters)
hect(o)-	100 times bigger	1 ha=100 a (1 hectare is 100 ares)
kilo-	1000 times bigger	1 kg=1000 g (1 kilogram is 1000 grams)

To convert larger units to smaller, it is necessary to multiply; to convert smaller units to larger, it is necessary to divide.

Example

$$5 \text{ m} = 5 \cdot 1000 \text{ mm} = 5000 \text{ mm}$$

$$5 \text{ cm}^2 = 5 \cdot 0.01 \text{ m} \cdot 0.01 \text{ m} = 0.0001 \text{ m}^2$$

$$5 \text{ m}^3 = 5 \cdot 100 \text{ cm} \cdot 100 \text{ cm} \cdot 100 \text{ cm} = 5000000 \text{ cm}^3$$

$$72 \text{ km/h} = 72 \cdot 1000 \text{ m} / 3600 \text{ s} = 20 \text{ m/s}$$