



## Mass conversions

kg to g	Mass in g = mass in kg x 1000
g to kg	Mass in kg = $\frac{\text{mass in g}}{1000}$
g to mg	Mass in mg = mass in g x 1000
mg to g	Mass in g = $\frac{\text{mass in mg}}{1000}$
mg to micrograms	Mass in micrograms = mass in mg x 1000
micrograms to mg	Mass in mg = $\frac{\text{mass in micrograms}}{1000}$

## Length conversions

km to m	Length in m = length in km x 1000
m to km	Length in km = $\frac{\text{length in m}}{1000}$
m to cm	Length in cm = length in m x 100
cm to m	Length in m = $\frac{\text{length in cm}}{100}$
m to mm	Length in mm = length in m x 1000
mm to m	Length in m = $\frac{\text{length in mm}}{1000}$
mm to micrometres	Length in micrometres = length in mm x 1000
micrometres to mm	Length in mm = $\frac{\text{length in micrometres}}{1000}$

## Volume conversions

cL to mL	Volume in mL = volume in cL x 10
mL to cL	Volume in cL = $\frac{\text{volume in mL}}{10}$
L to mL	Volume in mL = volume in L x 1000
mL to L	Volume in L = $\frac{\text{volume in mL}}{1000}$
mL to microlitres	Volume in microlitres = volume in mL x 1000
microlitres to mL	Volume in mL = $\frac{\text{volume in microlitres}}{1000}$

## Weight conversions

Here we say 'weight' to mean 'bodyweight', though these are all actually measures of mass.

kg to lbs	Weight in lbs = weight in kg x 0.454
lbs to kg	Weight in kg = $\frac{\text{weight in lbs}}{0.454}$
lbs to st	Weight in st = weight in lbs x 14
st to lbs	Weight in lbs = $\frac{\text{weight in st}}{14}$
st and lbs to lbs	Weight in lbs = (weight written before st x 14) + (weight written in lbs)
lbs to st and lbs	<p>To find the weight in st and lbs from a weight that is in lbs we need to:</p> <ul style="list-style-type: none"> <li>- Calculate: <math>\frac{\text{weight in lbs}}{14}</math></li> <li>- If this value is not a whole number (ie if there is anything after the decimal point other than zeros) then we ignore the numbers after the decimal point. For example, if we had 10.45, we would just write 10. This is the number of stones.</li> <li>- Calculate: weight in lbs – (number of stones x 14)</li> <li>- This is the number of pounds.</li> </ul> <p>Write the weight as '<i>number of stones st number of pounds</i>'.</p>

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