



## Semantic Field #19

## Systems of Measurement

The **United States customary system (USCS or USC)** developed from English units which were in use in the British Empire before the US declared its independence. However, the British system of measures was overhauled in **1824** to create the **Imperial System**, changing the definitions of some units. Therefore, while many U.S. units are essentially similar to their Imperial counterparts, there are significant differences between the systems.



Lenght

1 inch (in or ") = 25,4 mm 1 foot (ft or ') = 12" = 30,48 cm 1 yard (yd) = 3' = 91,44 cm 1 chain (ch) (UK) = 22 yd = 20,11 m 1 furlong (fur) (UK) = 10 ch = 201,16 m 1 mile (mi) = 8 fur = 1.760 yd = 1.609,34 m



**Volume** 

1 teaspoon (tsp) = 4,92 ml 1 tablespoon (Tbsp) = 3 tsp= 14,78 ml 1 US fluid ounce (fl oz) = 2 Tbsp = 29,57 ml 1 US cup (cp) = 8 fl oz = 236,58 ml 1 US pint (pt) = 2 cp = 473,17 ml 1 US gallon (gal) = 8 pt = 3,78 l



Weight

1 ounce (oz) = 28,34 g 1 pound (lb) = 16 oz = 453,59 g 1 stone (st) (UK) = 14 lb = 6,35 kg 1 quarter (qr) (UK) = 2 st = 12,70 kg 1 US hundredweight (cwt) = 100 lb = 45,35 kg 1 long hundredweight (UK) = 4 qr = 50,80 kg



**Degrees Fahrenheit** are used in the U.S. to measure temperatures, even though scientists worldwide use the **Kelvin** and **Celsius degrees**. The relationship between the different temperature scales is linear but the scales have different zero points, so conversion is not simply multiplication by a factor: pure water is defined to freeze at 32 °F = 0 °C and boil at 212 °F = 100 °C at 1 atm; the conversion formula is easily shown to be: F=(9/5)C+32