Conversions *within* the USC System and *between* the USC and SI

Length

1 mile (mi)	$\equiv$ 5280 feet (ft)	1 yard (yd)	$\equiv$ 3 feet (ft)
1 foot (ft)	$\equiv$ 12 inches (in)	1 inch (in)	= 2.54 centimeters (cm)
1 meter (m)	= 3.281 feet (ft) = 39.37 inches (in)	1 mile (mi)	= 1609 meters (m) = 1.609 kilometers (km)
1 light year (lt yr)	$= 9.454 \times 10^{15}$ meters (m) $= 5.876 \times 10^{12}$ miles (mi)		

Area = length squared

1 acre	$\equiv 43,560$ square feet (ft^2) = 4048 square meters (m^2)	1 hectare	$\equiv 10,000$ square meters (m^2) = 2.4704 acres

Volume = length cubed

1 gallon (gal)	= 3.785 liters (l)	1 fluid ounce (fl oz)	= 1.804 cubic inches (in^3)
1 cubic meter (m^3)	$\equiv$ 1000 liters (l) = 264.2 gallons (gal)	1 liter (l)	$\equiv$ 1000 cubic centimeters (cm^3) = 1.057 quarts (qt)
1 pint (pt)	$\equiv$ 2 cups $\equiv$ 16 fluid ounces (fl oz)	1 barrel of petroleum	$\equiv$ 42 gallons (gal) = 0.159 cubic meter (m^3)
1 quart (qt)	$\equiv$ 2 pints (pt)	1 gallon (gal)	$\equiv$ 4 quarts (qt)

Mass/Weight

1 kilogram (kg)	= 2.205 pounds (lb) (on the surface of the earth)
1 pound (lb)	$\equiv$ 16 ounces avoirdupois (oz) = 453.6grams (g) (on the surface of the earth)

Energy

1 joule (J)	$\equiv 1\frac{\text{kg} \cdot \text{m}^2}{\text{s}^2}$ $\equiv$ 1 watt-second (Ws) = 0.2390 calories (cal) $= 2.390 \times 10^{-4}$ food calories (Kcal) $= 9.484 \times 10^{-4}$ British thermal units (Btu) $= 6.242 \times 10^{18}$ electron volts (eV) = 0.7375 foot pounds (ft lb)
1 kiloton of TNT	$= 4.2 \times 10^{12}$ joules (J)

Power $= \dfrac{\textbf{energy}}{\textbf{time}}$

1 Watt (W)	$\equiv 1\dfrac{\text{joule}}{\text{second}}$
1 horsepower (hp)	$= 0.7457$ kilowatts (kW)

Time

1 year (yr)	$= 3.1558 \times 10^7$ seconds (s)	1 day	$\equiv 24$ hours (hr)
	$= 8.766 \times 10^3$ hours (hr)		$\equiv 1440$ minutes (min)
			$\equiv 8.64 \times 10^4$ seconds (s)

Temperature equations

Celsius Temp ($^\circ$C)	$\equiv \dfrac{5}{9}(^\circ\text{F} - 32)$
Fahrenheit Temp ($^\circ$F)	$\equiv \dfrac{9}{5}(^\circ\text{C}) + 32$
Kelvin Temp (K)	$= (^\circ\text{C}) + 273.15$

Prefixes for Conversion *within* the Metric System (SI)

10^1	deka (da)	10^{-1}	deci (d)
10^2	hecto (h)	10^{-2}	centi (c)
10^3	kilo (k)	10^{-3}	milli (m)
10^6	mega (M)	10^{-6}	micro (μ)
10^9	giga (G)	10^{-9}	nano (n)
10^{12}	tera (T)	10^{-12}	pico (p)
10^{15}	peta (P)	10^{-15}	femto (f)
10^{18}	exa (E)	10^{-18}	atto (a)