

## CONVERSION FACTORS

Energy	$1 \text{ cal} = 4.184 \text{ J}$ $1 \text{ eV} = 1.6 \times 10^{-19} \text{ J}$
Length	$1 \text{ \AA} = 1 \text{ angstrom} = 10^{-10} \text{ m}$ $1 \text{ ft} = 30.48 \text{ cm}$ $1 \text{ in} = 2.54 \text{ cm}$ $1 \text{ mi} = 1609 \text{ m}$ $1 \mu\text{m}(\text{micron}) = 10^{-4} \text{ cm}$ $1 \text{ mil} = 10^{-3} \text{ in}$
Mass	$1 \text{ lb}(\text{mass}) = 0.454 \text{ kg}$ $1 \text{ MeV}/c^2 = 1.07 \times 10^{-3} \text{ u}$ or $1 \text{ MeV}/c^2 = 1.78 \times 10^{-30} \text{ kg}$ $1 \text{ u} = \frac{1}{12} m(^{12}\text{C atom})$ $= 931.5 \text{ MeV}/c^2$ $= 1.66 \times 10^{-27} \text{ kg}$
Momentum	$1 \text{ MeV}/c = 5.34 \times 10^{-22} \text{ kg} \cdot \text{m/s}$