

## Conversion Factors

### Energy

- $1 \text{ J} = 0.2390 \text{ cal}$
- $1 \text{ cal} = 4.184 \text{ J}$  (by definition)

### Temperature

- $\text{K} = ^\circ\text{C} + 273.15$
- $^\circ\text{C} = (5/9)(^\circ\text{F} - 32)$

### Pressure

- $1 \text{ atm} = 760 \text{ mm Hg} = 760 \text{ torr}$  (by definition)

### Mass

- $1 \text{ kg} = 2.2046 \text{ lb}$
- $1 \text{ lb} = 453.59 \text{ g}$
- $1 \text{ ton} = 2000 \text{ lb}$

### Volume

- $1 \text{ mL} = 1 \text{ cm}^3$  (by definition)
- $1 \text{ qt} = 0.9463529 \text{ L}$

### Length

- $1 \text{ m} = 39.370 \text{ in}$
- $1 \text{ mi} = 1.60934 \text{ km}$
- $1 \text{ in} = 2.54 \text{ cm}$  (by definition)