

## UPLR Appendix A: SI/Inch-Pound Conversion Factors\*\*

### Length

1 mil (0.001 in) = 25.4 μm	1 micrometer = 0.039 37 mil
1 inch = 2.54 cm*	1 millimeter = 0.039 370 1 in
1 foot = 30.48 cm*	1 centimeter = 0.393 701 in
1 yard = 0.914 4 m*	1 meter = 3.280 84 ft
1 rod = 5.029 2 m	

### Area

1 square inch = 6.451 6 cm <sup>2</sup> *	1 square centimeter = 0.155 000 in <sup>2</sup>
1 square foot = 929.030 cm <sup>2</sup>	1 square decimeter = 0.107 639 ft <sup>2</sup>
1 square yard = 0.836 127 m <sup>2</sup>	1 square meter = 10.763 9 ft <sup>2</sup>

### Volume or Capacity

1 cubic inch = 16.387 1 cm <sup>3</sup>	1 cubic centimeter = 0.061 023 7 in <sup>3</sup>
1 cubic foot = 0.028 316 8 m <sup>3</sup>	1 cubic decimeter = 0.035 314 7 ft <sup>3</sup>
1 cubic foot = 28.316 8 L	
1 cubic yard = 0.764 555 m <sup>3</sup>	1 cubic meter = 35.314 7 ft <sup>3</sup> = 1.307 95 yd <sup>3</sup>
1 fluid ounce = 29.573 5 mL	1 milliliter = 0.033 814 fl oz
1 liquid pint = 473.177 mL	1 liter = 1.056 69 liq qt
	1 liter = 0.264 172 gal
1 liquid quart = 946.353 mL	1 dry pint = 550.610 5 mL
	1 dry quart = 1.101 221 L
1 gallon = 3.785 41 L	1 peck = 8.809 768 L
1 bushel = 35.239 1 L	1 gill = 118.294 1 mL

### Mass (Weight)

1 ounce = 28.349 5 g	1 milligram = 0.000 035 274 oz
1 pound = 453.592 37 g*	= 0.015 432 4 grain
	1 gram = 0.035 274 oz
1 grain = 64.798 91 mg*	1 kilogram = 2.204 62 lb

### Temperature

$$t_{\circ C} = \frac{5}{9} (t_{\circ F} - 32)$$

$$t_{\circ F} = 1.8 t_{\circ C} + 32$$

\*Exactly

\*\*These conversion factors are given to six or more significant digits in the event such accuracy is necessary. To convert to inch-pound units divide by the factor rather than multiplying.