

Appendix H: Units of Measure

Appendix Table H-1 Base Units of Measure

This table presents the standard base units of measure that may be encountered throughout this text and the associated reference texts.

| Measured Quantity | Symbol | Name |
|-------------------|-----------------|----------------------------|
| Temperature | °C | degrees Celsius |
| | °F | degrees Fahrenheit |
| Time | d | day |
| | h | hour |
| | m | minute |
| | s | second |
| | y | year |
| Length | ft or ' | foot |
| | in | inch |
| | m | meter |
| | yd | yard |
| Mass | g | gram |
| | lb | pound |
| Area | mi ² | square mile |
| | ft ² | square foot |
| | ft ³ | cubic foot |
| | m ³ | cubic meter |
| | yd ³ | cubic yard |
| Volume | gal | gallon |
| | L | liter |
| Concentration | ppb | parts per billion |
| | ppm | parts per million |
| Rate | cfs | cubic feet per second |
| | gpm | gallons per minute |
| Conductivity | mho | mho |
| Radioactivity | Ci | curie |
| | cpm | counts per minute |
| | Bq | becquerel |
| | d/m or dpm | disintegrations per minute |
| Radiation Dose | rad | radiation absorbed dose |
| | rem | roentgen equivalent man |
| | Sv | sievert |
| | R | roentgen |
| | Gy | gray |

Appendix Table H-2 Conversion Tables

These tables present the prefixes and conversions that may be encountered throughout this text and the associated reference texts.

| Conversion Table (Fractions and Multiples of Units) | | | | |
|---|--------------------|--------|--------|---------------|
| Multiple | Decimal Equivalent | Prefix | Symbol | Report Format |
| 10^6 | 1,000,000 | mega- | M | E+06 |
| 10^3 | 1,000 | kilo- | k | E+03 |
| 10^2 | 100 | hecto- | h | E+02 |
| 10 | 10 | deka- | da | E+01 |
| 10^{-1} | 0.1 | deci- | d | E-01 |
| 10^{-2} | 0.01 | centi- | c | E-02 |
| 10^{-3} | 0.001 | milli- | m | E-03 |
| 10^{-6} | 0.000001 | micro- | μ | E-06 |
| 10^{-9} | 0.000000001 | nano- | n | E-09 |
| 10^{-12} | 1E-12 | pico- | p | E-12 |
| 10^{-15} | 1E-15 | femto- | f | E-15 |
| 10^{-18} | 1E-18 | atto- | a | E-18 |

| Conversion Table (English and <i>Système International</i> Units) | | | | | |
|---|------------|---------------------|---------------------|-----------|--------------------------|
| Multiply | By | To Obtain | Multiply | By | To Obtain |
| in | 2.54 | cm | cm | 0.394 | in |
| ft | 0.305 | m | m | 3.28 | ft |
| mi | 1.61 | km | km | 0.621 | mi |
| lb | 0.4536 | kg | kg | 2.205 | lb |
| liq qt-US | 0.945 | L | L | 1.057 | liq qt-US |
| ft ² | 0.093 | m ² | m ² | 10.764 | ft ² |
| mi ² | 2.59 | km ² | km ² | 0.386 | mi ² |
| ft ³ | 0.028 | m ³ | m ³ | 35.31 | ft ³ |
| d/m | 0.450 | pCi | pCi | 2.22 | d/m |
| pCi | 10^{-6} | μ Ci | μ Ci | 10^6 | pCi |
| pCi/L (water) | 10^{-9} | μ Ci/mL (water) | μ Ci/mL (water) | 10^9 | pCi/L (water) |
| pCi/m ³ (air) | 10^{-12} | μ Ci/mL (air) | μ Ci/mL (air) | 10^{12} | pCi/m ³ (air) |

| Conversion Table (Units of Radiation Measure) | | |
|---|------------------------------|--------------------------------|
| Current System | <i>Système International</i> | Conversion |
| curie (Ci) | becquerel (Bq) | 1 Ci = 3.7×10^{10} Bq |
| rad (radiation absorbed dose) | gray (Gy) | 1 rad = 0.01 Gy |
| rem (roentgen equivalent man) | sievert (Sv) | 1 rem = 0.01 Sv |