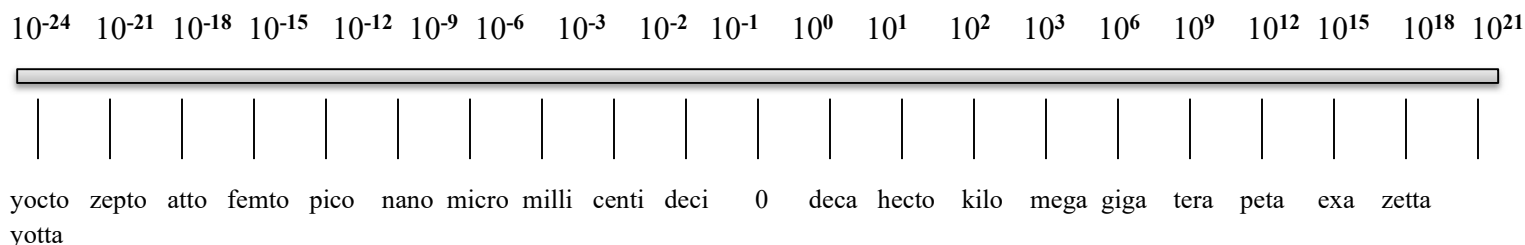


## CONCEPT: METRIC PREFIXES

Generally, we use scientific notation to turn small or large, inconvenient numbers into manageable ones, but in analytical chemistry it will become more useful to use metric prefixes.

- **Metric Prefixes** serve as labels for common base units.



**EXAMPLE:** It is safe to assume that all dilute aqueous solutions have a density near  $1.00 \frac{\text{g}}{\text{mL}}$ . If a solution is 2.50 parts per thousand, express the concentration in the following units.

$$\frac{\text{pg}}{\text{dL}}$$

**PRACTICE:** Based on the above example convert 5.71 ppb into the units presented below.

$$\frac{\text{kg}}{\mu\text{L}}$$