Metric Prefixes: The prefixes below change any of the base or derived metric units into a power of 10.

Prefix	Symbol	Multiple	Multiple
Tera-	T	10^{12}	1,000,000,000,000
Giga-	G	10^{9}	1,000,000,000
Mega-	M	10^{6}	1,000,000
kilo-	k	10^{3}	1,000
hecto-	h	10^{2}	100
deka-	dk	10^{1}	10
base unit		10^{0}	1
deci-	d	10^{-1}	0.1
centi-	c	10^{-2}	0.01
milli-	m	10^{-3}	0.001
micro-	μ	10^{-6}	0.000 001
nano-	n	10^{-9}	0.000 000 001
pico-	p	10^{-12}	0.000 000 000 001

5-step Method for Problem-solving

1. Identify the **UNKNOWN** in the problem.

2. Identify the **GIVEN** quantities and useful information.

3. Choose the appropriate **formulas** & **conversion factors.**

4. **Plan the solution**.
   - Identify how you will use formulas & conversion factors.
   - Set up **dimensional analysis** tables.
   - Isolate unknown variables in formulas.

5. Substitute the givens and **SOLVE**. *(Plug & Chug!)*