

General Science Conversion / EQUATION SHEET #1

Chapter 12

- $D = m / v$
- $v = d / t$
- $a = v_f - v_i / t$
- $p = m v$

Chapter 13

- $F = m a$
- $w = m g$
- $F = G (m_1 m_2) / d^2$

Chapter 16

- $PE = m h g$
- $GPE = w h$
- $KE = (.5) (m) (v^2)$
- $KE = (m) (v^2) / 2$

Chapter 15

- $W = F d$
- $W_i = (F_E) (d_E)$
- $W_o = (F_R) (d_R)$
- $P = W / t$
- $P = (F) (d) / t$
- $\text{Efficiency} = (W_o / W_i) * 100$
- $M.A. = F_o / F_i = d_i / d_o$
- $M.A. \text{ Continued} = F_R / F_E = l_e / l_R$

- Gravity: $9.8 \text{ m} / \text{s}^2$ or 9.8 N
- $G = 6.673 \times 10^{-11} \text{ N} \cdot \text{m}^2 / \text{kg}^2$
- $2.2 \text{ lbs} = 1 \text{ Kg}$
- $1 \text{ hp} = 750 \text{ watts}$
- $1 \text{ cc} = 1 \text{ ml}$
- $2.54 \text{ cm} = 1 \text{ inch}$
- $5280 \text{ ft} = 1 \text{ mile}$
- $3 \text{ ft} = 1 \text{ yd}$
- $2.54 \text{ cm} = 1 \text{ inch}$
- $1 \text{ ft} = 12 \text{ inch}$
- $365 \text{ days} = 1 \text{ yr}$
- $12 \text{ months} = 1 \text{ yr}$
- $7 \text{ days} = 1 \text{ wk}$

- Left



	Power of
10	
Tera	12
Giga	9
Mega	6
Kilo	3
Hecto	2
Deka	1
"Base"	0
deci	-1
centi	-2
milli	-3
micro	-6



LAB SAFETY

1. Notify your teacher immediately if any accident occurs.
2. Always keep the open end of the test tube away from your neighbor when heating.
3. When detecting odors, fan the vapors gently with your hand toward the nose.
4. NEVER TASTE CHEMICALS
5. Wait for cooling before touching hot objects.
6. Always dilute acid by pouring acids into water.
7. Wash hands with water immediately when chemicals have been spilled onto them.
8. Never change a procedure of an experiment without the consent of the instructor
9. Read the labels on reagent bottles carefully before using.
10. Never return unused chemicals back into reagent bottles if you have taken too large a quantity.
11. Clean up any spilled chemicals immediately.
12. Solutions containing acids may be poured down the sink, but, only with a generous amount of water.
13. Do not place used solids down the sink.
14. Heat volatile substances in a water bath in the hood.
15. When in doubt about anything, ask your instructor before proceeding.
16. Listen carefully to any safety precautions given by your instructor or in lab manual for a particular experiment.
17. Aprons will be worn during all experiments.
18. Safety Goggles must be worn when using Heat or when using ACID.

“Safety is not something for you to only read about, but is something for you to work at.”

