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| **Measurement** | **English** | **Metric** |
| Length | Feet: ft | Meters: m |
| Velocity | $$^{\begin{array}{c}\\ft\end{array}}/\_{sec}$$ | $$^{m}/\_{sec}$$ |
| Acceleration | $$^{\begin{array}{c}\\ft\end{array}}/\_{sec^{2}}$$ | $$^{\begin{array}{c}\\m\end{array}}/\_{sec^{2}}$$ |
| Gravity=g | $$32.2 ^{ft}/\_{sec^{2}}$$ | $$9.81^{m}/\_{sec^{2}}$$ |
| Force= m\*a | Lbf | Newton=N |
| Mass | Lbm/32.2 | Kg |
|  | 1 Lbm has a weight of 1 Lbf1 slug = 32.2 lbm | 1Kg has a weight of 9.81N |
| Work= $\vec{F}.\vec{D}$=Force Vector dot the Distance Vector | ft-Lbf , BTU1 BTU=778.17 ft-Lbf | J=Joules=N-m |
| Power | $\frac{ft-Lbf}{sec}$ , hp (Horse Power), $\frac{BTU}{hr}$ | Watts = $\frac{N-m}{sec}$ |
| 1Kg= 2.2046Lb1Inch = 2.54 cm1Gallon = 3.78541 Liters | 1 hp = 2545 $\frac{BTU}{hr}$  1yd = 3ft | 1 hp = 745.7 Watts 1m = 3.28084 ft |