

• Physics: the study of matter and its motion through space [Energy & Forces]

→ Matter: stuff and things [i.e. anything that has mass and takes up space]

• SI: Systeme internationale of measurements

→ Length: meters [m]

→ Mass: grams [g]

→ Volume: liters [L]

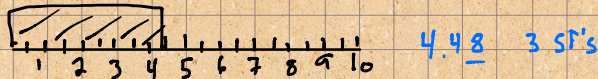
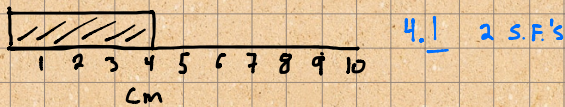
A List of the Metric Prefixes

Prefix	Symbol	Multiplier	
		Numerical	Exponential
yotta	Y	1,000,000,000,000,000,000,000,000	10^{24}
zetta	Z	1,000,000,000,000,000,000,000,000	10^{21}
exa	E	1,000,000,000,000,000,000,000	10^{18}
peta	P	1,000,000,000,000,000,000	10^{15}
tera	T	1,000,000,000,000	10^{12}
giga	G	1,000,000,000	10^9
mega	M	1,000,000	10^6
kilo	k	1,000	10^3
hecto	h	100	10^2
deca	da	10	10^1
no prefix means:		1	10^0
deci	d	0.1	10^{-1}
centi	c	0.01	10^{-2}
milli	m	0.001	10^{-3}
micro	μ	0.000001	10^{-6}
nano	n	0.000000001	10^{-9}
pico	p	0.000000000001	10^{-12}
femto	f	0.000000000000001	10^{-15}
atto	a	0.000000000000000001	10^{-18}
zepto	z	0.00000000000000000001	10^{-21}
yocto	y	0.0000000000000000000001	10^{-24}

↳ ex: pL = pico liters $\rightarrow 10^{-12}$

• Significant Figures: all digits recorded in a measurement

↳ uncertain digit: last digit recorded [estimated]

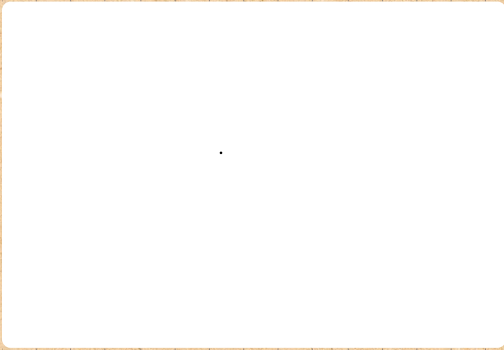


- Accuracy: how close to actual value \rightarrow take average

- Precision: how close to each other \rightarrow range

• Why is measurement important?

Video of "Biggest Science Failures"



Engineering in Haiti:

