

Aim: What tools & techniques are used in science investigation?

Do Now: How many inches are in a foot?
 How many feet in a mile?
 How many inches in a mile?

Homework
 LE 3, LE 5: p.16 # 1,6 Conversion worksheet

Sep 16-8:55 AM

System of International Units (SI)

The SI is founded on seven *SI base units* for seven *base quantities*

SI Base Units		
Base quantity	Name	Symbol
length	meter	m
mass	kilogram	kg
time	second	s
volume (liquid)	liter	l
thermodynamic temperature	kelvin	K
amount of substance	mole	mol
luminous intensity	candela	cd

Sep 16-7:59 PM

SI Prefixes

Factor	Name	Symbol
10^3 (1000)	kilo	k
10^2 (100)	hecto	h
10^1 (10)	deka	da
10^{-1} (0.1)	deci	d
10^{-2} (0.01)	centi	c
10^{-3} (0.001)	milli	m
10^{-6}	micro	u

Sep 16-8:23 PM

Conversions between Units

Common Units of Length	Abbreviation	Meter Equivalent
Millimeter	mm	1000 mm = 1 m
Centimeter	cm	100 cm = 1 m
Decimeter	dm	10 dm = 1 m
Meter	m	1 m
Kilometer	km	1 km = 1000 m

It is very useful to know how to convert between units in the metric system.
Example problems
 1) Convert 34.5 mm to m.
 2) Convert 23.6 mm to km. (HINT: You can avoid careless mistakes by first converting from mm into m, and then converting from m to km.)
 3) Convert 345 cm into m.
 4) Convert 12.5 cm into mm.
 5) Convert 829 cm into km.
 Convert 42.5 km into cm.

Sep 16-11:02 PM