

<u>1st</u>	<u>3rd</u>	<u>5th</u>
A - 11	A - 11	A - 9
B - 7	B - 8	B - 6
C - 12	C - 9	C - 6
D - 3	D - 6	D - 6
F - 2	F - 1	F - 1
<u>80.9%</u>	<u>78.4%</u>	<u>77.4%</u>

95 students

31 - A

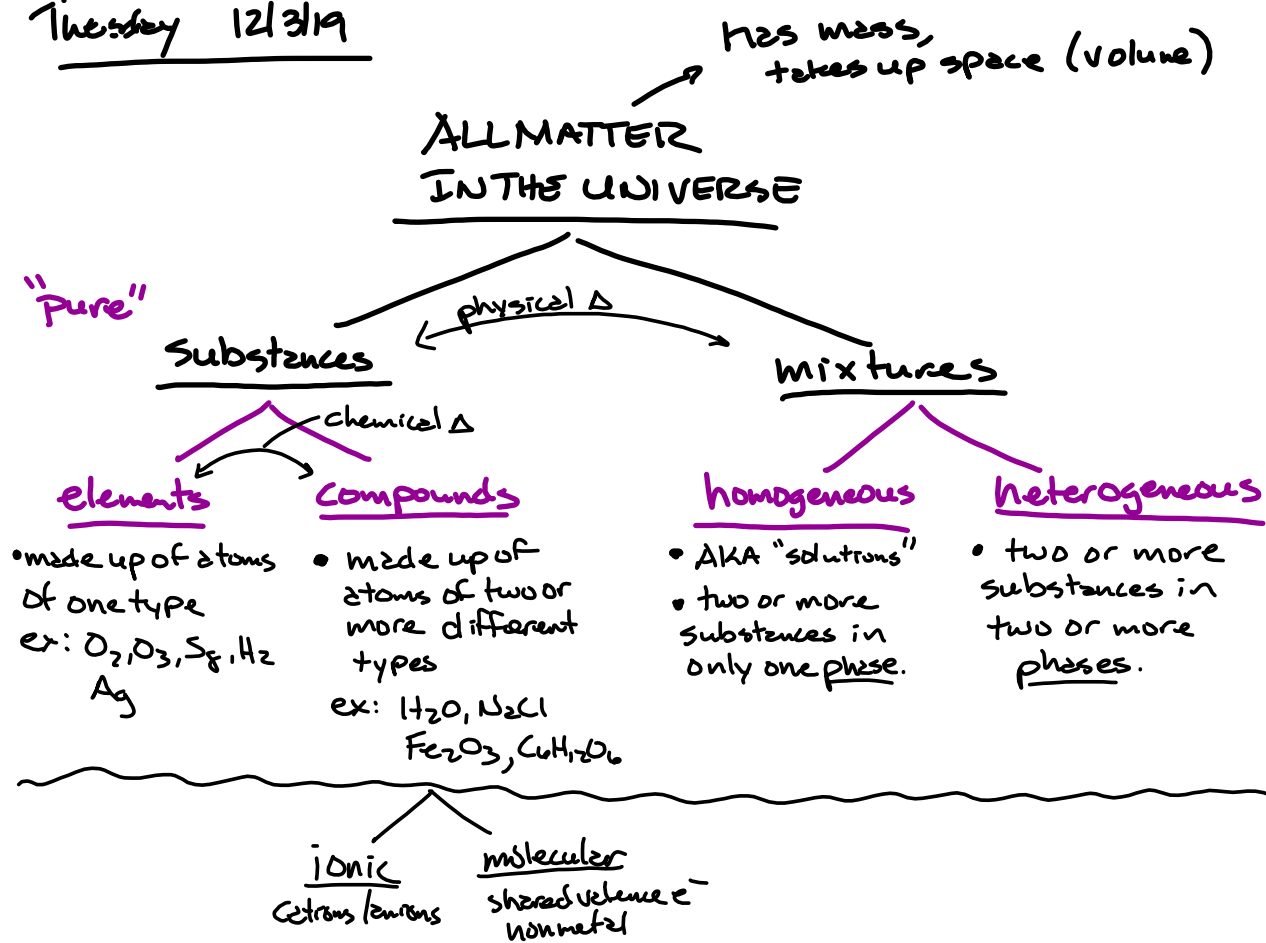
21 - B

27 - C

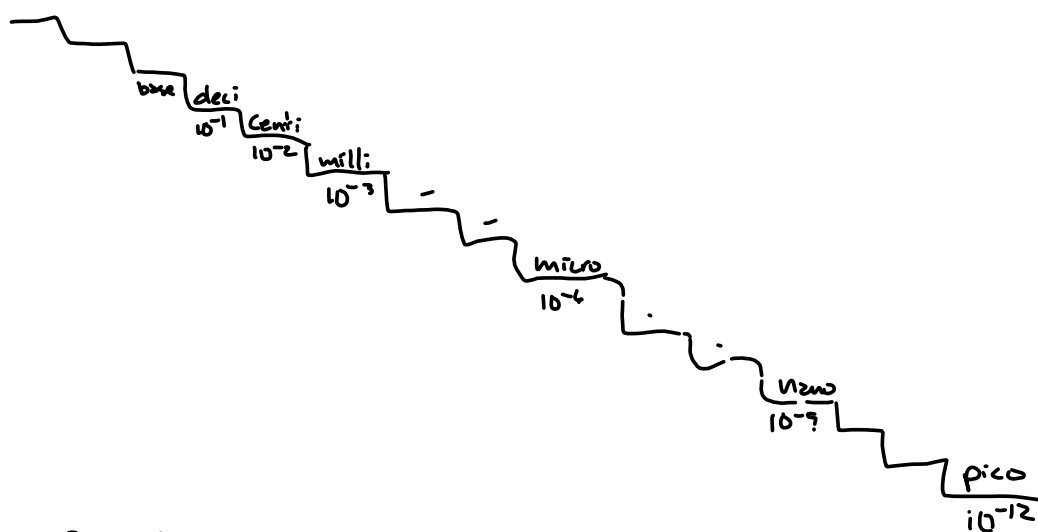
15 - D

4 - F

Thursday 12/3/19



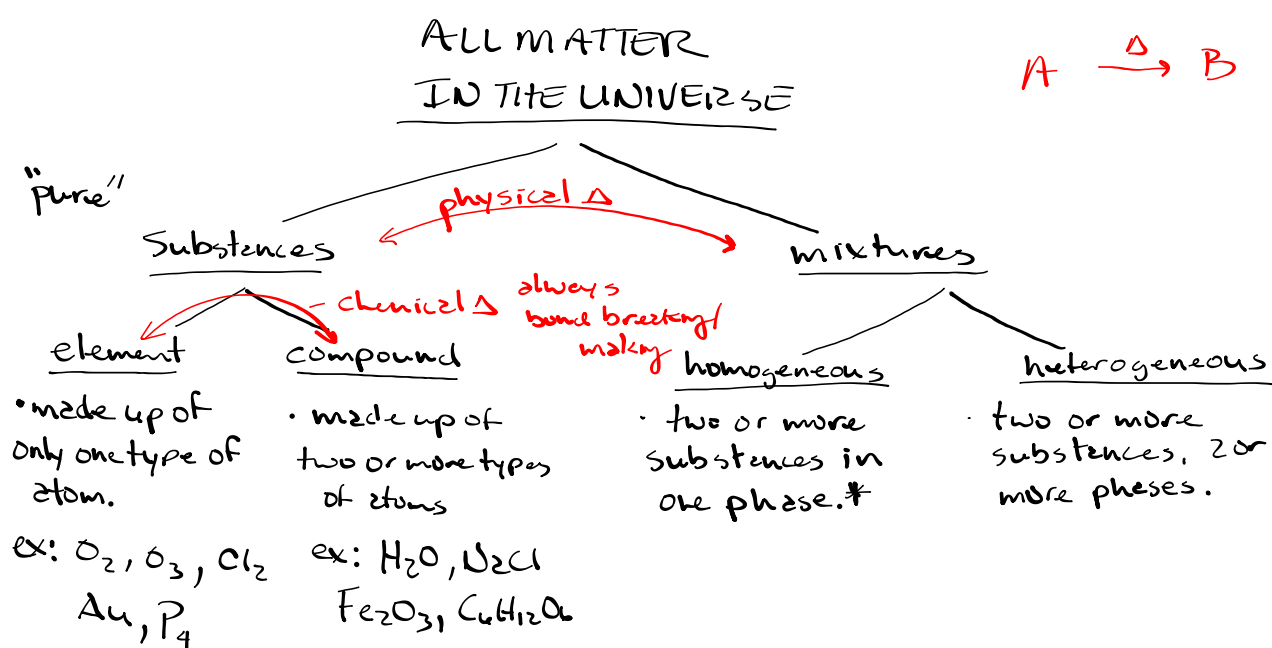
* phase = $\geq$ region of constant composition.



Convert 1.0 mi $\rightarrow$ cm

$$1.0 \cancel{\text{mi}} \times \frac{5280 \cancel{\text{ft}}}{1 \cancel{\text{mi}}} \times \frac{12 \cancel{\text{in}}}{1 \cancel{\text{ft}}} \times \frac{2.54 \text{ cm}}{1 \cancel{\text{in}}} =$$

Tuesday 12/3/19



* phase - a region of constant composition.

Chem 1A Homework Due Monday

Read: 1.2-1.3

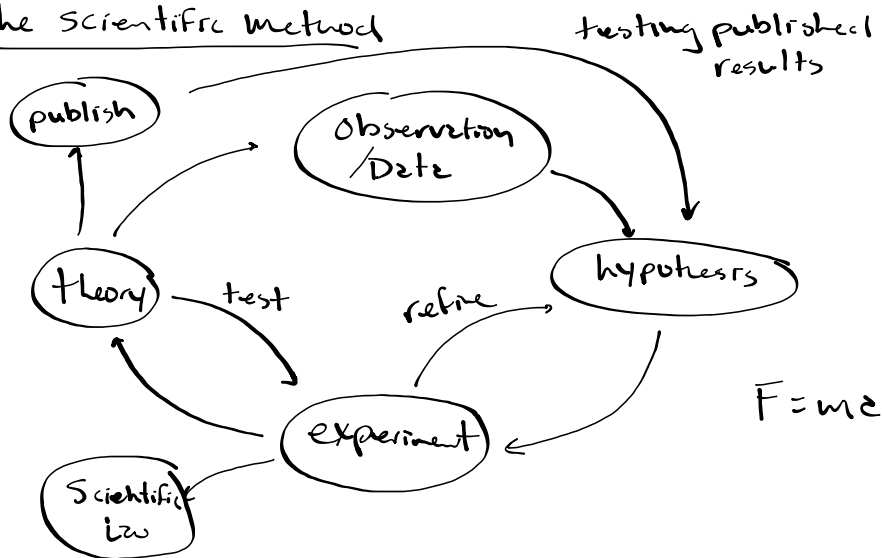
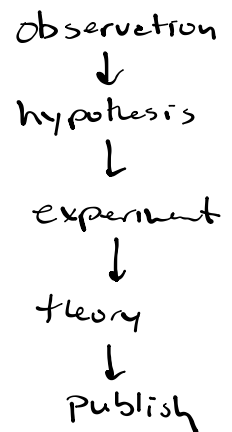
Do: 6-17 (all) p.27

Homework Due Tuesday 12/10/19

Read: 2.1 (Scientific Method)

Do: 1-5 p.35

Monday 12/9/19

The Scientific MethodThe Book

hypothesis - a testable statement with an explanation "Why"?
 "guess" $\uparrow$ "educated"

Scientific law - a concise statement that summarizes $F = ma$

FACT the results of many experiments $F_G = G \frac{m_1 m_2}{r^2}$

theory - AKA 'model' $\rightarrow$ an extensively tested explanation of why experiments give the results they do.

- $\rightarrow$ can never be proven, only disproven
- $\rightarrow$ must predict the results of future experiments
- $\rightarrow$ tend to change/be refined as new results are obtained.

Physical & chemical properties of matter

A

Physical

density
boiling point / melting point
color, shape, size
magnetic susceptibility
hardness
polarity / charge

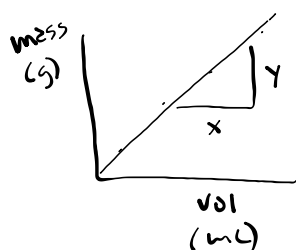
chemical

• reactivity
• acid / base characteristics
• functional group type
 eg. alcohol, ketone, hydrocarbon
 oxidizer, reducer etc.

Evidence of a chemical change

- color change
- heat absorbed / evolved
- new substance formed
- density
- eg. - bubbled, formation of precipitate
- light emitted
- not reversible
- bond making / breaking

Intensive properties of matter → characteristics of matter



that do not change depending on the sample size.
ex: density, color, mp, bp, polarity
specific heat capacity

Extensive prop. of matter → characteristics of matter that do change as sample size changes.
ex: mass, fuel content, calories (food)
volume, surface area

Tuesday 12/10/19The SI System of Units & Dimensional AnalysisSeven Base Units

<u>quantity</u>	<u>Name</u>	<u>symbol</u>
length	meter	m
mass	Kilogram	kg
time	second	s
x electric current	ampere	A
temperature	Kelvin	K
amount of substance	mole	mol
x luminous intensity	candela	cd

 $m^3 = \text{vol}$