Phys/Chem Weekly Planner: All science week of 4.13.2020 (remember all previous weeks are archived below)

Objectives for the week: Chm.2.1.1 Explain the energetic nature of phase changes.
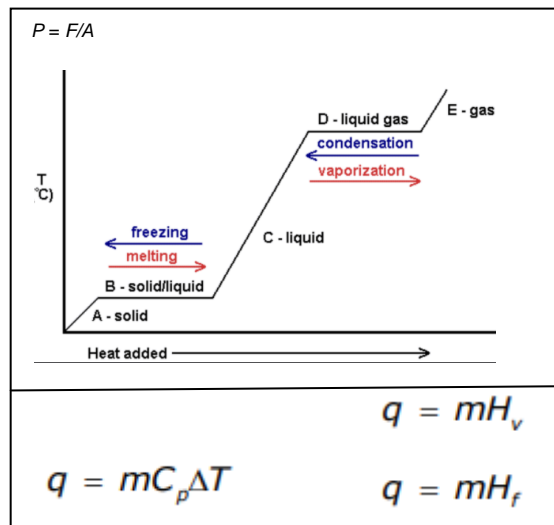Phy.2.2 Analyze the behavior of waves.

Day	Honors Physics	Honors Chemistry
Mon 4.13	Finish last week's assignment and test if you had asked for an extension. MODULES: SOUND and optics - Do all the reading, videos and guided practice. TAKE notes! week overview ZOOM meeting scheduled.	Finish last week's assignment and test if you had asked for an extension. MODULES: Thermochemistry - Do all the reading, videos and guided practice. TAKE notes! overview of the week video ZOOM meeting scheduled.
Tues 4.14	MODULES: SOUND and optics - Do all the reading, videos and guided practice. TAKE notes! Sound and Light Test Review https://screencast-o-matic.com/watch/cYf2F8zhDi ZOOM meeting scheduled.	MODULES: Thermochemistry - Do all the reading, videos and guided practice. TAKE notes! Thermochem TEST review https://screencast-o-matic.com/watch/cYf2odzech ZOOM meeting scheduled.
Wed 4.15	LAB: Sound Link to our sound lab SPR2020 -I found a problem with this for SOME kids. let me know if it doesn't work for you. ZOOM meeting scheduled.	LAB: Heating and cooling curves- link is in the schoology assignment ZOOM meeting scheduled.
Thurs 4.16	LAB: Light LightLabPHYspr2020 ZOOM meeting scheduled.	Thermochem TEST review https://screencast-o-matic.com/watch/cYf2odzech ZOOM meeting scheduled.
Friday	TEST: Sound and Light	TEST: Thermochem

Chemistry THERMOCHEM:

Chemistry Reference Tables

Name	Value
Avogadro's number	6.022×10^{23} particles/mole
Gas constant (R)	$0.0821 \frac{\text{L atm}}{\text{mole K}}$ $62.4 \frac{\text{L mmHg}}{\text{mole K}}$ $8.314 \frac{\text{L kPa}}{\text{mole K}}$
Standard pressure	1.00 atm = 101.3 kPa = 760. mmHg = 760. torr
Standard temperature	0°C or 273K
Volume of 1 mole of any gas at STP	22.4 L

Thermodynamic Constants	Symbol	Value
Heat of fusion of water	H_f (water)	334 J/g
Heat of vaporization of water	H_v (water)	2,260 J/g
Specific heat of water	C_p (water)	2.05 $\frac{J}{g°C}$ for ice, 2.02 $\frac{J}{g°C}$ for steam, 4.18 $\frac{J}{g°C}$ for liquid

$P = F/A$

D - liquid gas
E - gas
condensation
vaporization
C - liquid
freezing
melting
B - solid/liquid
A - solid
Heat added

$$q = mH_v$$

$$q = mC_p\Delta T$$

$$q = mH_f$$

Physics LIGHT:

Wave Phenomena

$$T = \frac{1}{f}$$

$$v = f\lambda$$

$$n = \frac{c}{v}$$

$$n_1 \sin\theta_1 = n_2 \sin\theta_2$$

$$\sin\theta_c = \frac{n_2}{n_1}$$

$$n_1 v_1 = n_2 v_2$$

c = speed of light in a vacuum

f = frequency

n = index of refraction

T = period

v = speed

θ = angle

θ_c = critical angle of incidence

λ = wavelength

The Index of Refraction for Common Substances	
Air	1.00
Alcohol	1.36
Corn Oil	1.47
Diamond	2.42
Glass, Crown	1.52
Glass, Flint	1.61
Glycerol	1.47
Quartz, Fused	1.46
Water	1.33

Warm up activities! CANCELLED for this week

Monday - https://evansccca.weebly.com/

TURN OFF cell phone and put in the bin 😊

PHYZ Warm up: TURN OFF cell phone and put in the bin 😊	CHEM Warm up: Turn OFF your cell phone and put in bin 😊

Due to unforeseen events that have occurred and will conflict with our meeting today, the Teacher Advisory Council meeting is being rescheduled for next Thursday, April 16 at 3:45 pm. The same information below for joining the meeting will be used. We apologize for any inconvenience!

To join the video meeting, click this link: https://meet.google.com/prh-fkju-hzp academic talk https://www.sciencecircle.org/event/covid-19-2/ 10AM SLT