

## Ch. 5 – Gases

FP- “For Practice”- found within the chapter (FMP is for more practice), **CC**- “Conceptual Connection” – found within the Chapter, **SAQ**- Self-Assessment Quiz, numbered questions (with no acronym) are exercises at the end of the chapter. **Complete all parts to each question unless otherwise specified.**

**Always answer and explain/show work- see selected SAQ and CC questions**

Required Topics for Notes	Video Title	Video Link	Length	Problems	Pages
Pressure; barometer; torr; mmHg; atm; Pa; Boyle’s, Charles’s, Avogadro’s laws (on these gas laws, concern yourself with the mathematical relationships, not the specific names of the scientists); ideal gas law	The Ideal Gas Law: Crash Course Chemistry #12	<a href="https://www.youtube.com/watch?v=BxUS1K7xu30">https://www.youtube.com/watch?v=BxUS1K7xu30</a>	9:02	FP: 5.2, 5.3, 5.4, 5.5, 5.6 FMP: 5.6 CC 5.1	p. 197-211
Molar volume of gases, STP, density of a gas formula (I will teach you this math in class),	Stoichiometry	<a href="http://www.bozemanscience.com/ap-chem-028-stoichiometry">http://www.bozemanscience.com/ap-chem-028-stoichiometry</a>	1:15 (Watch ONLY 6:30-7:45 of video)	CC: 5.2, 5.3, 5.5 FP 5.13 SAQ #5	I would read these pages* p.211-214, 221-223 (skip example 5.12 and its work for now)
Dalton’s Law of Partial Pressure, mole fraction, vapor pressure, collecting gas over water (draw and diagram figure 5.14)	Partial Pressures and Vapor Pressure: Crash Course Chemistry #15	<a href="https://www.youtube.com/watch?v=JbqtqCunYzA">https://www.youtube.com/watch?v=JbqtqCunYzA</a>	11:54	CC 5.4	Now come back to these pages** p. 214-221 (skip 217 and examples 5.9-11 for now)
Briefly outline 3 postulates of KMT on p. 224, draw and	Gases	<a href="http://www.bozemanscience.com/ap-chem-014-gases">http://www.bozemanscience.com/ap-chem-014-gases</a>	9:56	CC 5.6 (use some type of coloration or shading with your	p. 224-226 (skip 226-238 starting at KMT and Ideal

explain figures 5.18 and 5.19 (these are called Maxwell-Boltzman distributions and are discussed in the Bozeman videos)				pencil), CC 5.8, 49, 81, 89	Gas section on p. 226), p. 229
Diffusion, effusion, describe the effect of intermolecular forces on gas behavior	Crash Course: Passing Gases	<a href="https://www.youtube.com/watch?v=TLRZAFU_9Kg">https://www.youtube.com/watch?v=TLRZAFU_9Kg</a>	11:25	CC 5.9, 91	p. 230-236 (don't worry about math for corrections for intermolecular forces or Van der Waals equation)