Name
TA

Chemistry 11
2021-2022

Chapter Guide # 5: Gases

BIG IDEA: Gas Laws, Ideal Gases, KMT, Gas Stoichiometry

Fundamental Knowledge (I know)

- ☐ The Physical characteristics of gases
- ☐ How to use Boyles law and can relate it to everyday situations
- ☐ How to use the ideal gas law to solve for unknown amounts
- ☐ How to use a balanced chemical equation to calculate volumes of gases.

Curricular Competencies (I can)

	Proficiency Scale Teacher and Student self assessment (Circle one)	**Evidence (How do you know?)**
I can: Demonstrate an awareness of assumptions, question information given, and identify bias in their work and in primary and secondary sources	**Emerging (EMG)** Initial Understanding **Developing (DEV)** Partial/Near Complete Understanding **Proficient (PRF)** Complete Understanding **Extending (EXT)** Sophisticated Understanding	
Consider the role of scientists in innovation	**Emerging (EMG)** Initial Understanding **Developing (DEV)** Partial/Near Complete Understanding **Proficient (PRF)** Complete Understanding **Extending (EXT)** Sophisticated Understanding	

Student Signature:

Teacher Signature:

Date:

TOPIC	OPTION 1	OPTION 2	OPTION 3
Substances that Exist in Gases	**Create** a glossary of the "Key Words" in chapter 5 (Pgs. 169 – 209) **Read** Pages 169 – 171 and **complete Review Question**s: 5.2 on Pg. 209.	**Create** a poster summarizing the physical characteristic of gases and include examples. **Complete Review Question**s: 5.2 on Pg. 209.	**Choose your own adventure!** Pick up a planning sheet from the Science Kiosk. Create a plan! Make sure you read through the first page of this LG, as you will need to design ways to learn/practice and show your understanding of the topic(s) and skill(s) (competencies.) You will need to have a teacher approve your plan before beginning the LG.
Pressure of Gases and Gas Laws	**Read** Pages 171 – 181 and **complete Review Question**s: 5.3 and 5.7, on Pgs. 209 and 210. **Complete *"Example: Practice Exercises"*** 5.1, 5.2, on Pgs. 173 and 174.	**Create** a "tri-fold" that summarizes the Kelvin Scale and the different gas laws. **Complete Review Question**s: 5.3, 5.7, and 5.15 on Pgs. 209 and 210. **Complete *"Example: Practice Exercises"*** 5.1, 5.2, on Pgs. 173 and 174.	
Ideal Gas Equation	**Read** Pages 181 – 186 and **complete Review Question**s: 5.27 and 5.29 on Pg. 211. **Complete *"Example: Practice Exercises"*** 5.3, 5.4, 5.5, 5.6, and 5.7.	**Create** Five (5) Ideal Gas Questions similar to *"Example: Practice Exercises". **Include an answer key!*** **Complete Review Question**s: 5.27 and 5.29 on Pg. 211. **Complete *"Example: Practice Exercises"*** 5.3, 5.4, 5.5, 5.6, and 5.7.	
Gas Stoichiometry and Law of Partial Pressures	**Read** Pages 190 – 196 and **complete Review Question**s: 5.51 and 5.52 on Pg. 211. **Complete *"Example: Practice Exercises"*** 5.11, 5.12, 5.13 and 5.14	**Summarize** the information from Pgs. 190 – 196 in a digital presentation. **Complete Review Question**s: 5.51 and 5.52 on Pg. 211. **Complete *"Example: Practice Exercises"*** 5.11, 5.12,5.13, and 5.14	
Chapter Review	**Complete *"problems"*** 5.20, 5.34, 5.42, 5.52, and 5.54		
Lab	No Labs for this section.		
Self Assessment	Reflect on the Fundamental Knowledge and Curricular Competencies. Use the rubric and make goals to improve for your next learning guide.		
Interview **AND** Quiz	See you teacher for an interview (Bring all your complete work to the interview) **AND** to have a quiz slip signed for the test center.		

Resources can be found at www.THSSscience.com or the Science Kiosk
*User: **THSS***
*Password: **science***