Honors Physics February 12-16, 2024

Day	Academic Objective	Activities	Homework/Assessments	Biblical Integration
M	Define and apply Newton's universal law of gravitation	Discuss ch 7, pg. 232 - 239 "Newton's Universal Law of Gravitation"	 Final Prep for King of the Hill Competition Web post due Friday, 11:59 PM 	Students will understand that God continuously sustains all things throughout the present by understanding Newton's universal law of gravitation
TU	Apply knowledge of energy and torque	King of the Hill Competition	• Pg. 264 - 268: 12 - 19, 22, 23, 39, 40, 52	
W	Review concepts and problem solving in chapter 7	Overview of TEST on Ch 7	TEST on Chapter 7	
ТН	Demonstrate proficiency with the concepts and problem solving in chapter 7	TEST on Chapter 7	•	
F	Explore fluids and buoyant force	thLAB: Buoyancy - Due Tuesday. Answer ALL observations, questions & Extensions in complete sentences on notebook paper	 thLAB: Buoyancy – Due Tuesday. Answer ALL observations, questions & Extensions in complete sentences on notebook paper Web post due Friday, 11:59 PM 	

King of the Hill Project (Full overview on next page)

• RACE Tuesday. February 13

TEST on chapter 7 Thursday, February 15

Lab reports for 2nd half of term due 3/5 – Save as PDF 2X

Let God have you, and let God love you - and don't be surprised if your heart begins to hear music you've never heard and your feet learn to dance as never before. Max Lucado

Trust God's love. His perfect love. Don't fear He will discover your past. He already has. Don't fear disappointing Him in the future. He can show you the chapter in which you will. With perfect knowledge of the past and perfect vision of the future, He loves you perfectly in spite of both. Max Lucado

King of the Hill Project Overview

Step 4: King of the Hill Project Car - Due Monday, February 12

- This car must follow exactly the project guidelines. Pay particular attention to size guidelines!
- Give yourself PLENTY of time to construct your car and to fix small and large things that will break, spin out, snap, flip, or just plain not work.
- You must demonstrate that your car can run at least 10 cm; however, you may take your car home to make final adjustments before the next day competition.

Step 5: King of the Hill Competition – Due Tuesday, February 13

- Your car must be ready to run 7 minutes after the bell for class.
- Also bring to class a final schematic of your car with the parts labeled, including what the parts are made from. More than one view might be necessary to show the "engine" of the car and how it works Also include a description of how your car runs and the physics principles behind its design.
- Bring plenty of spare parts!
- In addition to the King of the Hill competition, there will be a race for speed and a race for distance.