Name: Kevin Woolridge		Grading Quarter: Q1	Week Beginning: W8
School Year: 2023		Subject: Conceptual Physics and Engineering	
Monday	Notes:	• **Objective**: Students will demonstrate their understanding of the change in motion and energy including concepts of concepts of speed, velocity, and acceleration of an object or system in one dimension, as evidenced by successfully building and racing a mousetrap car for a minimum of 5 meters. **Lesson Overview: Mousetrap car lab and prototype test day** • Brainstorm concepts and /research project ideas with small group • Independent build and testing time during class. • Students will be able to test their prototype mousetrap Cars and make modifications as needed to be successful on race day. • Students will be provided with the Mousetrap car race track and timer. Students will complete their time trial log due on race day.	Essential HS.P3U1.6 Collect, analyze, and interpret data regarding the change in motion of an object or system in one dimension, to construct an explanation using Newton's Laws.
Tuesday	Notes:	• **Objective**: Students will demonstrate their understanding of the change in motion and energy including concepts of concepts of speed, velocity, and acceleration of an object or system in one dimension, as evidenced by successfully building and racing a mousetrap car for a minimum of 5 meters. **Lesson Overview: Mousetrap car race day** • Students will compete 8in the Mousetrap car race. • Students will be given 3 attempts to complete the 5 Meter race in the fastest time. • Students will be provided with the Mousetrap car race track and timer. • Students will complete and tun in their race day evaluation worksheets.	Essential HS.P3U1.6 Collect, analyze, and interpret data regarding the change in motion of an object or system in one dimension, to construct an explanation using Newton's Laws.
Wednesday	Notes:	• **Objective**: Students will demonstrate their understanding of Projectile motion including concepts of motion in two dimensons, gravity, circular motion, and Satellite Motion as evidenced by successfully building a trenbuchet capable of launching a projectile a mnimum of 40 ft and accuratly hiting a target lees than 60 ft from the launch site. **Lesson Overview: Mousetrap car lab and Lab time/build day.** • Introduce projectile motion/trebuchert project • Power point and lecture Gravity1. • Hewitt video - **Gravity I:** The inverse-square law is explained and then related to the law of universal gravitation. Weight and weightlessness, the discoveries of the planets Neptune and Pluto, and the universality of gravitation are also discussed. • Complete assigned readings and questions from the text, chapter 8.	Essential HS.P3U1.6 Collect, analyze, and interpret data regarding the change in motion of an object or system in one dimension, to construct an explanation using Newton's Laws.

Thursday	Notes:	• **Objective**: Students will demonstrate their understanding of Projectile motion including concepts of motion in two dimensons, gravity, circular motion, and Satellite Motion as evidenced by successfully building a trenbuchet capable of launching a projectile a mnimum of 40 ft and accuratly hiting a target lees than 60 ft from the launch site. **Lesson Overview: Mousetrap car lab and Lab time/build day.** • Continue with projectile motion/trebuchert physics concepts • Power point and lecture Gravity1. • Hewitt video - **Gravity II:** The discussion of gravitation continues with the emphasis on ocean, earth, and atmospheric tides. Other topics include tunnels through the earth, black holes, the big bang, and speculations of an oscillating universe. • Complete assigned readings and questions from the text, chapter 8.	Essential HS.P3U1.6 Collect, analyze, and interpret data regarding the change in motion of an object or system in one dimension, to construct an explanation using Newton's Laws.
Friday	Notes:	• **Objective**: Students will demonstrate their understanding of physics concepts of gravity as evidenced by completion of assigned qauestions from the text and the Gravity quiz with 80% accuracy. **Lesson Overview: Mousetrap car lab and Lab time/build day.** • Continue with projectile motion/trebuchert physics concepts. • Power point and lecture Gravity review • Quiz Gravity	Essential HS.P3U1.6 Collect, analyze, and interpret data regarding the change in motion of an object or system in one dimension, to construct an explanation using Newton's Laws.