Name: Kevin Woolridge		Grading Quarter: Q2	Week Beginning: W9
School Year: 2023		Subject: Conceptual Physics and Engineering	
Monday	Notes:	Objective: Students will demonstrate understanding of physics concepts of vibrations and waves, light, and sound including Vibrations of a Pendulum, Wave Description, Wave Speed, Transverse Waves, Longitudinal Waves, Wave Interference Standing Waves, Doppler Effect, Bow Waves, and Shock Waves. With 80% accuracy as evidenced by completion of Waves physics exam. Lesson Overview. • Demonstration laser reflection, "Seeing Sound", including a visual demonstration of resonance, standing waves beats, and interference both constructive and destructive. • Students will continue to work on their "Seeing Sound" project. • Review Chapter 19, 20 and 21.	Essential HS.P4U1.10 Construct an explanation about the relationships among the frequency, wavelength, and speed of waves traveling in various media, and their applications to modern technology.
Tuesday	Notes:	Objective: Students will demonstrate understanding of physics concepts of vibrations and waves, light, and sound including Vibrations of a Pendulum, Wave Description, Wave Speed, Transverse Waves, Longitudinal Waves, Wave Interference Standing Waves, Doppler Effect, Bow Waves, and Shock Waves. With 80% accuracy as evidenced by completion of Waves physics exam. Lesson Overview. • Hewitt video, Hewitt video, Light and Color: The electromagnetic nature of light and the reason its speed changes when passing through transparent materials are explained. Several demonstrations illustrate the addition of different colors of light. Finally, the colors of everyday things such as the sky, sunset, and ocean are discussed. • Review Readings, Chapter 26, 27, 28, 29, 30 and 31.	Essential HS.P4U1.10 Construct an explanation about the relationships among the frequency, wavelength, and speed of waves traveling in various media, and their applications to modern technology.
Wednesday	Notes:	Objective: Students will demonstrate understanding of physics concepts of vibrations and waves, light, and sound including Vibrations of a Pendulum, Wave Description, Wave Speed, Transverse Waves, Longitudinal Waves, Wave Interference Standing Waves, Doppler Effect, Bow Waves, and Shock Waves. With 80% accuracy as evidenced by completion of Waves physics exam. Lesson Overview. • Hewitt video, Reflection and Refraction: Mirrored and diffuse reflection are compared. Refraction is demonstrated using a water tank. The concepts of total internal reflection and light dispersion are discussed, leading to a demonstration of properties of a rainbow. • Introduction to physics project, "Seeing Sound".	Essential HS.P4U1.10 Construct an explanation about the relationships among the frequency, wavelength, and speed of waves traveling in various media, and their applications to modern technology.

Thursday	Notes:	Objective: Students will demonstrate understanding of physics concepts of vibrations and waves, light, and sound including Vibrations of a Pendulum, Wave Description, Wave Speed, Transverse Waves, Longitudinal Waves, Wave Interference Standing Waves, Doppler Effect, Bow Waves, and Shock Waves. With 80% accuracy as evidenced by completion of Waves physics exam. Lesson Overview. • Hewitt video, Hewitt video, Light and Color: The electromagnetic nature of light and the reason its speed changes when passing through transparent materials are explained. Several demonstrations illustrate the addition of different colors of light. Finally, the colors of everyday things such as the sky, sunset, and ocean are discussed. • Review Readings, Chapter 26, 27, 28, 29, 30 and 31. • "Seeing Sound" prototype test day.	Essential HS.P4U1.10 Construct an explanation about the relationships among the frequency, wavelength, and speed of waves traveling in various media, and their applications to modern technology.
Friday	Notes:	Objective: Students will demonstrate understanding of physics concepts of vibrations and waves, light, and sound including Vibrations of a Pendulum, Wave Description, Wave Speed, Transverse Waves, Longitudinal Waves, Wave Interference Standing Waves, Doppler Effect, Bow Waves, and Shock Waves. With 80% accuracy as evidenced by completion of Waves physics exam. Lesson Overview. • "Seeing Sound" project due date. • Complete video presentation, turn in Journal. • Presentation, Final Exam review. • Review Readings, Chapter 26, 27, 28, 29, 30 and 31.	Essential HS.P4U1.10 Construct an explanation about the relationships among the frequency, wavelength, and speed of waves traveling in various media, and their applications to modern technology.