

	Monday	Wednesday	Thursday	Friday
Unit/ Lesson	Unit 4: Waves and Sound	Unit 3: Energy and Society	Unit 3: Energy and Society	Unit 3: Energy and Society
Big Ideas	Mechanical waves have specific characteristics and predictable properties. Sound is a mechanical wave. Mechanical waves can affect structures, society, and the environment in positive and negative ways.	Mechanical waves have specific characteristics and predictable properties. Sound is a mechanical wave. Mechanical waves can affect structures, society, and the environment in positive and negative ways.	Mechanical waves have specific characteristics and predictable properties. Sound is a mechanical wave. Mechanical waves can affect structures, society, and the environment in positive and negative ways..	Mechanical waves have specific characteristics and predictable properties. Sound is a mechanical wave. Mechanical waves can affect structures, society, and the environment in positive and negative ways..
Overall Expectations	E2. investigate, in qualitative and quantitative terms, the properties of mechanical waves and sound, and solve related problems;	E3. demonstrate an understanding of the properties of mechanical waves and sound and of the principles underlying their production, transmission, interaction, and reception.	E2. investigate, in qualitative and quantitative terms, the properties of mechanical waves and sound, and solve related problems;	E2. investigate, in qualitative and quantitative terms, the properties of mechanical waves and sound, and solve related problems;
Specific Expectations	E2.6 predict the conditions needed to produce resonance in vibrating objects or air columns (e.g., in a wind instrument, a string instrument, a tuning fork), and test their predictions through inquiry [IP, PR, AI]	E3.4 identify the properties of standing waves, and, for both mechanical and sound waves, explain the conditions required for standing waves to occur	E2.4 investigate the relationship between the wavelength, frequency, and speed of a wave, and solve related problems [PR, AI]	E2.4 investigate the relationship between the wavelength, frequency, and speed of a wave, and solve related problems [PR, AI]
Learning Goals	<ul style="list-style-type: none"> - Interference of waves [constructive & interference] - Fixed and Free-end reflections 	Standing waves Resonance in air columns	Review of chapter 8	Review continued
Success Criteria				
Instructional Strategies	Lecture on interference of waves, media boundaries and waves and reflections. Related examples will be analyzed and solved.	Lecture on standing waves and the resonance in air columns.	This class will be about a review of waves and sound in preparation for a test.	Students will continue to review on waves and sound.
Assessment & Evaluation	Class Work [AFL]	Class Work [AFL]	Class Work [AFL]	[Class Work [AFL]
Homework / Class Work		Questions on page 425 textbook	Chapter 8 review pages 408-410	
Materials & Resources	Nelson Physics 11 [Textbook]	Nelson Physics 11 [Textbook]	Nelson Physics 11 [Textbook]	Nelson Physics 11 [Textbook]

