

WEEK OF March 11th-15th, 2024

COURSE: 8th Grade ADV Science /General Science		TEACHER: Turner		PERIODS: 1, 2,3,4,6		
	OBJECTIVES	ACTIVITIES	MATERIALS	HOMEWORK	ASSESSMENT	STANDARDS
MON	<p>Describe what constitutes a wave.</p> <p>Describe the parts of a wave.</p> <p>Describe the properties of a wave.</p> <p>Differentiate between transverse and longitudinal waves.</p> <p>Differentiate between mechanical and electromagnetic waves.</p> <p>Describe how a sound wave travels.</p> <p>Describe amplitude, frequency, and speed of sound waves.</p> <p>Describe the properties of a sound wave that determine pitch and loudness.</p> <p>Describe how loudness is measured.</p> <p>Describe resonance and infrasound.</p>	<p>GEN BR: Wave questions</p> <p>ADV BR: Wave questions</p> <p>Students will:</p> <p>GEN: Read Wave Article & complete questions; complete Waves & Wave Properties guided notes using PPT; complete Wave Speed practice problems on notes; demonstrate waves made with a slinky; begin Waves Graphic Organizer.</p> <p>ADV: Complete PhET simulation - Waves on a String; complete Wave Speed & Frequency word problems; discuss Unit 7 notes pp.3-5; read Can You Hear This? Article; read Infrasound article; watch Elephants & Infrasound video; complete Sound Crossword.</p>	<p>Wave Article & questions</p> <p>Waves & Wave Properties guided notes & PPT</p> <p>Wave Speed practice problems</p> <p>Waves Graphic Organizer</p> <p>PhET simulation - Waves on a String</p> <p>Wave Speed & Frequency word problems</p> <p>E3/A+ Unit 7 notes</p> <p>Can You Hear This? Article</p> <p>Infrasound article</p> <p>Elephants & Infrasound video</p> <p>Sound Crossword</p>	Finish any unfinished classwork	Participation	<p>ACOS:</p> <p>17. Create & manipulate a model of a simple wave to predict & describe the relationships between wave properties.</p> <p style="padding-left: 20px;">a. Analyze & interpret data to illustrate an electromagnetic spectrum.</p> <p>18. Use models to demonstrate how light & sound waves differ in how they are absorbed, reflected, & transmitted through different types of media.</p> <p>19. Integrate qualitative information to explain that common communication devices use electromagnetic waves to encode & transmit information.</p>
TUES	<p>Differentiate between mechanical and electromagnetic waves.</p> <p>Describe how waves interact with matter and other waves.</p>	<p>GEN BR: Waves questions</p> <p>ADV BR: Waves questions</p> <p>Students will:</p>	<p>Waves Graphic Organizer</p> <p>Waves Interaction Sort</p> <p>Sound Energy</p>	Finish any unfinished classwork	Participation	<p>ACOS:</p> <p>17. Create & manipulate a model of a simple wave to predict & describe the relationships between wave properties.</p>

	<p>Describe how a sound wave travels.</p> <p>Describe amplitude, frequency, and speed of sound waves.</p> <p>Describe the properties of a sound wave that determine pitch and loudness.</p> <p>Describe how loudness is measured.</p> <p>Describe resonance and infrasound.</p> <p>Describe loudness of sound and how it affects hearing.</p> <p>Describe how and why sonar uses sound waves.</p> <p>Describe doppler effect.</p>	<p>GEN: Finish Waves Graphic Organizer; complete Waves Interaction Sort; complete Sound Energy article & questions.</p> <p>ADV: Complete Sound WebQuest; read Loud Sounds Article; complete Decibel Scale Practice.</p>	<p>article & questions</p> <p>Sound WebQuest</p> <p>Loud Sounds Article</p> <p>Decibel Scale Practice</p>			<p>a. Analyze & interpret data to illustrate an electromagnetic spectrum.</p> <p>18. Use models to demonstrate how light & sound waves differ in how they are absorbed, reflected, & transmitted through different types of media.</p> <p>19. Integrate qualitative information to explain that common communication devices use electromagnetic waves to encode & transmit information.</p>
W E D	<p>Describe the properties of a sound wave that determine pitch and loudness.</p> <p>Describe how loudness is measured.</p> <p>Describe infrasound and how it affects animals.</p> <p>Describe loudness of sound and how it affects hearing</p> <p>Describe how and why sonar uses sound waves.</p> <p>Describe doppler effect.</p>	<p>GEN BR: Sound questions</p> <p>ADV BR: Sound questions</p> <p>Students will:</p> <p>GEN: Complete Sound Doodle notes; discuss infrasound & watch Elephants & Infrasound video; discuss how sound is measured in decibels; watch Decibel video; complete Decibel Scale Practice; complete Sound Crossword.</p> <p>ADV: Complete Checkpoint 7.1; read Hearing Loss Article; discuss Sonar & Doppler Effect & watch videos; complete Comparing Sound Waves Task Cards;</p>	<p>Sound Doodle notes</p> <p>Elephants & Infrasound video</p> <p>Decibel video</p> <p>Decibel Scale Practice</p> <p>Sound Crossword</p> <p>E3/A+ Checkpoint 7.1</p> <p>Hearing Loss Article</p> <p>Sonar & Doppler Effect videos</p> <p>Comparing Sound Waves Task Cards</p> <p>Sound Waves Task Cards</p>	Finish any unfinished classwork	Participation; checkpoint	<p>ACOS:</p> <p>17. Create & manipulate a model of a simple wave to predict & describe the relationships between wave properties.</p> <p>a. Analyze & interpret data to illustrate an electromagnetic spectrum.</p> <p>18. Use models to demonstrate how light & sound waves differ in how they are absorbed, reflected, & transmitted through different types of media.</p> <p>19. Integrate qualitative information to explain that common communication devices use electromagnetic waves to encode & transmit information.</p>

		complete Sound Waves Task Cards.				
T H U R S	<p>Describe the electromagnetic spectrum in terms of wavelength and frequency.</p> <p>Describe uses and dangers of electromagnetic spectrum waves.</p> <p>Describe how matter affects light interactions.</p> <p>Differentiate between reflection, refraction, diffraction, and interference.</p>	<p>GEN BR: Sound questions</p> <p>ADV BR: Sound questions</p> <p>Students will:</p> <p>GEN: Complete EM Spectrum guided notes using PPT; complete Waves & EM Spectrum worksheet; complete EM Spectrum Circuit.</p> <p>ADV: Discuss Unit 7 notes pp.5-7; watch The Original Double Slit Experiment video; complete Light & Matter Lab.</p>	<p>EM Spectrum guided notes & PPT</p> <p>Waves & EM Spectrum worksheet</p> <p>EM Spectrum Circuit</p> <p>E3/A+ Unit 7 notes</p> <p>The Original Double Slit Experiment video</p> <p>Light & Matter Lab</p>	Finish any unfinished classwork	Participation; lab	<p>ACOS:</p> <p>17. Create & manipulate a model of a simple wave to predict & describe the relationships between wave properties.</p> <p>a. Analyze & interpret data to illustrate an electromagnetic spectrum.</p> <p>18. Use models to demonstrate how light & sound waves differ in how they are absorbed, reflected, & transmitted through different types of media.</p> <p>19. Integrate qualitative information to explain that common communication devices use electromagnetic waves to encode & transmit information.</p>
F R I	<p>Describe how light interacts with matter.</p> <p>Predict how light will interact with different types of matter.</p> <p>Describe how color is seen.</p> <p>Differentiate between color addition and color subtraction.</p> <p>Describe the electromagnetic spectrum in terms of wavelength and frequency.</p> <p>Describe uses and dangers of electromagnetic spectrum waves.</p>	<p>GEN BR: EM spectrum questions</p> <p>ADV BR: Light interaction questions</p> <p>Students will:</p> <p>GEN: Complete Light Doodle notes; discuss how light interacts with matter; complete Physics Classroom - Color Addition & Subtraction to demonstrate how colors of light are created & differ from pigmentation; watch How a TV Works in Slow Motion video.</p> <p>ADV: Read</p>	<p>Light Doodle notes</p> <p>Physics Classroom - Color Addition & Subtraction</p> <p>How a TV Works in Slow Motion</p> <p>Helpful or Harmful? Article</p> <p>EM Spectrum WebQuest</p> <p>E3/A+ Unit 7 notes</p> <p>EM Spectrum Activity</p>	Finish any unfinished classwork	Participation	<p>ACOS:</p> <p>17. Create & manipulate a model of a simple wave to predict & describe the relationships between wave properties.</p> <p>a. Analyze & interpret data to illustrate an electromagnetic spectrum.</p> <p>18. Use models to demonstrate how light & sound waves differ in how they are absorbed, reflected, & transmitted through different types of media.</p> <p>19. Integrate qualitative information to explain that common communication devices use electromagnetic</p>

		Helpful or Harmful? Article; complete EM Spectrum WebQuest; discuss Unit 7 notes pp.7-13; complete EM Spectrum Activity.				waves to encode & transmit information.
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