







Unit Title:	Unit 2: WAVES
Unit Vocabulary:	<p>6-PS1-4: atom • boil • condense • evaporate • freeze • gas • inert • kinetic energy • liquid • matter • melt • molecule • particle • particle motion • phase • phase change • pressure • pure substance • solid • system • temperature • thermal energy • vapor</p> <p>6-PS3-3: absorption • conduction • conductor/conductivity • constraint • convection • criterion/criteria • fluid • heat • heat transfer • infrared light • insulate/insulator • kinetic energy • radiation • reflect/reflectivity • retain/retention • solar energy • visible light • thermometer</p> <p>6-PS3-4: controlled variable • dependent variable • independent variable • initial • mass • newton (N) • proportional • rate • ratio • time • variable • volume</p> <p>6-PS4-2: absorption • amplitude • barrier • bend • brightness • color • color filter • echo • electromagnetic wave • frequency • lens • light wave • mechanical wave • medium/media • mirror • path • prism • propagate • ray • ray diagram • reflection • refraction • sound wave • transmit • transparent • vibration • visible light spectrum • wave • wavelength</p>
Upcoming Common Assessments (MasteryConnect):	Waves Quiz Next Week

	Standard(s) + Learning Objective	Activating Experience (Opening, may include "Scholar Starter")	Learning Experience (Work Time: SB Materials and Resources, Vocab, Scaffolds/Supports, SWRL, Costas)	Formative or Summative Assessment(s)	Summarizing Experience (Closing)	WICOR, AVID and/or ELlevation Strategies (aligned with learning objective)
M O N D A Y	<p>Standard (write out): 6-PS4-2 Develop and use a model to describe how waves are reflected, absorbed, or transmitted through various materials.</p> <p>Learning Objective Skill (what), Content (why), Product (how):</p>	<p>Compare and contrast</p> <p>Compare/Contrast Ideas</p> <p>Think-pair-share to talk about their answers</p>	<p>Standards Based Materials & Resources: FNT Sound Notes SLIDES: GO TO SLIDE #</p> <p> Sound FNT Notes</p> <p>Sound FNT Notes: Sound FNT Notes.pdf</p> <p>Phet Sound Waves Simulation</p> <p>Phet Wave on a String</p> <p>Content/Academic Vocabulary:</p>	<p>Teacher observation</p> <p>Exit Ticket</p>	<p>Exit Ticket-What are waves made of? (energy)</p>	<p>Think-Pair-Share</p> <p>Exit Ticket</p> <p>Sentence Starters</p> <p>Word Banks</p> <p>Visual Aids</p>

	I can define what sound is, explain how sound travels through different types of mediums based on its properties, and determine the properties of sound using real world examples by completing my FNT notes		<p>Reflection, refraction, transmission, absorption, medium, amplitude, barrier, bend, frequency, sound wave, transmit, transparent, vibration, wavelength</p> <p><u>ILAP/IEP/504 Scaffolds & Supports:</u> Small Group, Preferential Seating, Sentence Stems, Visual Aids, Word Banks, Pre-teach Vocab, Chunked Assignments</p> <p><u>Opportunities to SWRL:</u> S-Think Pair Share, Large group conversation W-Scholar Starter, Focused Note Taking R-Notes Slideshow and Sheet L- Think Pair Share, Large Group Presentation</p> <p><u>Costa's Levels of Thinking/Questioning:</u></p> <p>Level 1 What property of sound describes how high or low it is?</p> <p>Level 2 Why does sound travel faster through a solid than through air?</p> <p>Level 3 Predict what would happen if there were no air on Earth. Would we hear sounds? Why or why not?</p> <p><u>Class Structure:</u> 1-Begin with Scholar Starter 2-Sound FNT notes 3-Phet Simulation</p>			
T U E S D A	<p>Standard (write out): 6-PS4-2 Develop and use a model to describe how waves are reflected, absorbed, or transmitted through</p>	<p>Compare and contrast</p> <p>Compare/Contrast Ideas</p>	<p><u>Standards Based Materials & Resources:</u> FNT Sound Notes SLIDES: GO TO SLIDE #  Sound FNT Notes</p> <p>Sound FNT Notes:  Sound FNT Notes.pdf</p>	<p>Teacher observation</p> <p>Exit Ticket</p>	<p>Exit Ticket-What is one type of medium that sound waves have to travel through?</p>	<p>Think-Pair-Share</p> <p>Exit Ticket</p> <p>Sentence Starters</p> <p>Word Banks</p>

Y	<p>various materials.</p> <p>Learning Objective Skill (what), Content (why), Product (how): I can define what sound is, explain how sound travels through different types of mediums based on its properties, and determine the properties of sound using real world examples by completing my FNT notes</p>	<p>Think-pair-share to talk about their answers</p>	<p>Phet Sound Waves Simulation</p> <p>Phet Wave on a String</p> <p><u>Content/Academic Vocabulary:</u> Reflection, refraction, transmission, absorption, medium, amplitude, barrier, bend, frequency, sound wave, transmit, transparent, vibration, wavelength</p> <p><u>ILAP/IEP/504 Scaffolds & Supports:</u> Small Group, Preferential Seating, Sentence Stems, Visual Aids, Word Banks, Pre-teach Vocab, Chunked Assignments</p> <p><u>Opportunities to SWRL:</u> S-Think Pair Share, Large group conversation W-Scholar Starter, Focused Note Taking R-Notes Slideshow and Sheet L- Think Pair Share, Large Group Presentation</p> <p><u>Costa's Levels of Thinking/Questioning:</u></p> <p>Level 1 What property of sound describes how high or low it is?</p> <p>Level 2 Why does sound travel faster through a solid than through air?</p> <p>Level 3 Predict what would happen if there were no air on Earth. Would we hear sounds? Why or why not?</p> <p><u>Class Structure:</u> 1-Begin with Scholar Starter 2-Sound FNT notes 3-Phet Simulation</p>		<p>(solid/liquid/gas/ answers may vary)</p>	<p>Visual Aids</p>
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W E D N E S D A Y	<p>Standard (write out): 6-PS4-2 Develop and use a model to describe how waves are reflected, absorbed, or transmitted through various materials.</p> <p><u>Learning Objective</u> Skill (what), Content (why), Product (how):</p> <p>I can define what sound is, explain how sound travels through different types of mediums based on its properties, and determine the properties of sound using real world examples by completing my FNT notes</p>	<p>Compare and contrast</p> <p>Compare/Contrast Ideas</p> <p>Think-pair-share to talk about their answers</p>	<p>Standards Based Materials & Resources: Slinky, Dominos, Water container, Flashlight</p> <p>Content/Academic Vocabulary: Waves, crest, trough, amplitude, wavelength, longitudinal, transverse, refract, medium</p> <p>ILAP/IEP/504 Scaffolds & Supports: Small Group, Preferential Seating, Sentence Stems, Visual Aids, Word Banks, Pre-teach Vocab, Chunked Assignments</p> <p>Opportunities to SWRL: S-Think Pair Share, Rotations W-Scholar Starter, Exit Ticket L- Think Pair Share, Rotations</p> <p>Costa's Levels of Thinking/Questioning: Level 1: What is a wave? Level 2: How does each station help you understand waves more? Level 3: What kind of waves did you experience?</p> <p>Class Structure: 1-Begin with Scholar Starter 2-Introduce Stations (A: With teacher-dominos to show wave effect//B: With para-pro-slinky wave visual//C: Light in water effect with flashlight) 3-Rotate through each station once in small groups 4-Exit Ticket</p>	<p>Teacher observation</p> <p>Exit Ticket</p>	<p>Exit Ticket-Scholars will answer the question: "What is one way you saw waves today?"</p> <p>"I saw a wave in the _____ station when we _____."</p>	<p>Think-Pair-Share</p> <p>Exit Ticket</p> <p>Sentence Starters</p> <p>Word Banks</p> <p>Visual Aids</p>
T H U R S D A Y	<p>Standard (write out): 6-PS4-2 Develop and use a model to describe how waves are reflected, absorbed, or transmitted through various materials.</p> <p><u>Learning Objective</u> Skill (what), Content (why), Product (how):</p>	<p>Compare and contrast</p> <p>Compare/Contrast Ideas</p> <p>Think-pair-share to talk about their answers</p>	<p>Standards Based Materials & Resources: FNT Sound Notes SLIDES: GO TO SLIDE #</p> <p> Sound FNT Notes</p> <p>Sound FNT Notes:  Sound FNT Notes.pdf</p> <p>Sound Word Search</p> <p>Content/Academic Vocabulary: Reflection, refraction, transmission, absorption, medium, amplitude, barrier, bend, frequency,</p>	<p>Teacher observation</p> <p>Exit Ticket</p>	<p>Exit Ticket-Does sound that is loud have more energy or less?</p> <p>(more)</p>	<p>Think-Pair-Share</p> <p>Exit Ticket</p> <p>Sentence Starters</p> <p>Word Banks</p> <p>Visual Aids</p>

	I can define what sound is, explain how sound travels through different types of mediums based on its properties, and determine the properties of sound using real world examples by completing my FNT notes		<p>sound wave, transmit, transparent, vibration, wavelength</p> <p><u>ILAP/IEP/504 Scaffolds & Supports:</u> Small Group, Preferential Seating, Sentence Stems, Visual Aids, Word Banks, Pre-teach Vocab, Chunked Assignments</p> <p><u>Opportunities to SWRL:</u> S-Think Pair Share, Large group conversation W-Scholar Starter, Focused Note Taking R-Notes Slideshow and Sheet L- Think Pair Share, Large Group Presentation</p> <p><u>Costa's Levels of Thinking/Questioning:</u></p> <p>Level 1 What property of sound describes how high or low it is?</p> <p>Level 2 Why does sound travel faster through a solid than through air?</p> <p>Level 3 Predict what would happen if there were no air on Earth. Would we hear sounds? Why or why not?</p> <p><u>Class Structure:</u> 1-Begin with Scholar Starter 2-Sound FNT notes 3-Phet Simulation</p>			
F R I D A Y	<p>Standard (write out): 6-PS4-2 Develop and use a model to describe how waves are reflected, absorbed, or transmitted through various materials.</p>	<p>Compare and contrast</p> <p>Compare/Contrast Ideas</p> <p>Think-pair-share to</p>	<p><u>Standards Based Materials & Resources:</u> <u>Quiz Concepts</u></p> <p><u>Content/Academic Vocabulary:</u> Reflection, refraction, transmission, absorption, visible light, medium, reflection, refraction</p> <p><u>ILAP/IEP/504 Scaffolds & Supports:</u></p>	<p>Teacher observation</p> <p>Exit Ticket</p>	<p>Exit Ticket-Turn in post it note with questions/concepts that are confusing.</p>	<p>Think-Pair-Share</p> <p>Exit Ticket</p> <p>Sentence Starters</p> <p>Word Banks</p> <p>Visual Aids</p>

	<p><u>Learning Objective</u> Skill (what), Content (why), Product (how): I can reinforce my understanding of waves by reviewing key concepts as a class.</p>	<p>talk about their answers</p>	<p>Small Group, Preferential Seating, Sentence Stems, Visual Aids, Word Banks, Pre-teach Vocab, Chunked Assignments</p> <p><u>Opportunities to SWRL:</u> S- collaboration on lab W- lab document, FNT notes, R- FNT notes L- quick review, costas q's</p> <p><u>Costa's Levels of Thinking/Questioning:</u> Level 1: What is the distance from crest to crest called? Level 2: Label the parts of a wave. Level 3: What can be concluded about mechanical waves when a cork moves up and down but stays in the same position in a mechanical wave?</p> <p><u>Class Structure:</u> 1-Begin with Scholar Starter 2-Review Quiz concepts as a class</p>			
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