

Unit Title:	Unit 2: WAVES
Unit Vocabulary:	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 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 6-PS3-4: controlled variable • dependent variable • independent variable • initial • mass • newton (N) • proportional • rate • ratio • time • variable • volume 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
Upcoming Common Assessments (MasteryConnect):	Waves <u>Quiz</u> 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	Standard (write out): 6-PS4-2 Develop and use a model to describe how waves are reflected, absorbed, or transmitted through various materials.  Learning Objective Skill (what), Content (why), Product (how):	Compare and contrast  Compare/Contrast Ideas  Think-pair-share to talk about their answers	Standards Based Materials & Resources: FNT Sound Notes SLIDES: GO TO SLIDE #  Sound FNT Notes  Sound FNT Notes:  Sound FNT Notes.pdf  Phet Sound Waves Simulation  Phet Wave on a String  Content/Academic Vocabulary:	Teacher observation Exit Ticket	Exit Ticket-What are waves made of? (energy)	Think-Pair-Share  Exit Ticket  Sentence Starters  Word Banks  Visual Aids

	I can define what		Deflection refraction transmission shows the	Γ	Γ	
			Reflection, refraction, transmission, absorption,			
	sound is, explain how		medium, amplitude, barrier, bend, frequency,			
	sound travels		sound wave, transmit, transparent, vibration,			
	through different		wavelength			
	types of mediums		ILAP/IEP/504 Scaffolds & Supports:			
	based on its		Small Group, Preferential Seating, Sentence Stems, Visual Aids, Word Banks, Pre-teach Vocab, Chunked			
	properties, and		Assignments			
	determine the		Opportunities to SWRL:			
	properties of sound		S-Think Pair Share, Large group conversation			
	using real world		W-Scholar Starter, Focused Note Taking			
	examples by		R-Notes Slideshow and Sheet			
	completing my FNT		L- Think Pair Share, Large Group Presentation			
	notes		Costa's Levels of Thinking/Questioning:			
			Level 1			
			What property of sound describes how high or low			
			it is?			
			10.13			
			Level 2			
			Why does sound travel faster through a solid than			
			through air?			
			tinough an :			
			Level 3			
			Predict what would happen if there were no air on			
			Earth. Would we hear sounds? Why or why not?			
			Class Structure:			
			1-Begin with Scholar Starter			
			2-Sound FNT notes			
			3-Phet Simulation			
	Standard (write out):	Compare and	Standards Based Materials & Resources:	Teacher	Exit Ticket-What	Think-Pair-Share
T	<b>6-PS4-2</b> Develop and	<u>contrast</u>	FNT Sound Notes SLIDES: GO TO SLIDE #	observation	is one type of	
U	use a model to describe		□ Sound FNT Notes		medium that	Exit Ticket
E	how waves are			Exit Ticket	sound waves	
S	reflected, absorbed, or	Compare/Contrast	Sound FNT Notes:		have to travel	Sentence Starters
D	transmitted through	Ideas	Sound FNT Notes.pdf		through?	Word Banks
A			Sound (W) Notes, pur			vvolu baliks
	<u>l</u>		<u> </u>	l	!	

various materials.	Think-pair-share to	Phet Sound Waves Simulation	(solid/liquid/gas/ answers may	<mark>Visual Aids</mark>
<b>Learning Objective</b>	talk about their		vary)	
Skill (what), Content (why), Product (how): I can define what	answers	Phet Wave on a String		
		Content/Academic Vocabulary:		
sound is, explain how sound travels		Reflection, refraction, transmission, absorption,		
		medium, amplitude, barrier, bend, frequency,		
through different		sound wave, transmit, transparent, vibration,		
types of mediums		wavelength		
based on its		ILAP/IEP/504 Scaffolds & Supports:		
properties, and		Small Group, Preferential Seating, Sentence Stems,		
determine the		Visual Aids, Word Banks, Pre-teach Vocab, Chunked		
properties of sound		Assignments		
using real world		Opportunities to SWRL:		
examples by		S-Think Pair Share, Large group conversation W-Scholar Starter, Focused Note Taking		
completing my FNT				
notes		R-Notes Slideshow and Sheet		
		L- Think Pair Share, Large Group Presentation		
		Costa's Levels of Thinking/Questioning:		
		Level 1		
		What property of sound describes how high or low it is?		
		Level 2		
		Why does sound travel faster through a solid than		
		through air?		
		Level 3		
		Predict what would happen if there were no air on		
		Earth. Would we hear sounds? Why or why not?		
		Class Structure:		
		1-Begin with Scholar Starter		
		2-Sound FNT notes		
		3-Phet Simulation		

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	Standard (write out):	Compare and	Standards Based Materials & Resources:	Teacher	Exit	Think-Pair-Share
W	<b>6-PS4-2</b> Develop and	<u>contrast</u>	Slinky, Dominos, Water container, Flashlight	observation	Ticket-Scholars will answer the	Exit Ticket
E	use a model to describe		Content/Academic Vocabulary:	Exit Ticket	question: "What	EXIL FICKEL
D	how waves are		Waves, crest, trough, amplitude, wavelength,	EXIL TICKEL	is one way you	Sentence Starters
N	reflected, absorbed, or	Compare/Contrast	longitudinal, transverse, refract, medium		saw waves	Sentence Starters
E	transmitted through	<u>Ideas</u>	ILAP/IEP/504 Scaffolds & Supports:		today?"	Word Banks
S	various materials.		Small Group, Preferential Seating, Sentence Stems,		,	
D		Think-pair-share to	Visual Aids, Word Banks, Pre-teach Vocab, Chunked		"I saw a wave in	Visual Aids
A	Learning Objective	talk about their	Assignments		the	
Y	Skill (what), Content	answers	Opportunities to SWRL: S-Think Pair Share, Rotations		station when we	
	(why), Product (how):		•			
			W-Scholar Starter, Exit Ticket			
	I can define what		L- Think Pair Share, Rotations			
	sound is, explain how		Costa's Levels of Thinking/Questioning:			
	sound travels		Level 1: What is a wave?  Level 2: How does each station help you understand			
	through different		waves more?			
	types of mediums		Level 3: What kind of waves did you experience?			
	based on its					
	properties, and		Class Structure:			
	determine the		1-Begin with Scholar Starter			
	properties of sound		2-Introduce Stations (A: With teacher-dominoes to			
	using real world		show wave effect//B: With para-pro-slinky wave			
	examples by		visual//C: Light in water effect with flashlight)			
	completing my FNT		3-Rotate through each station once in small groups			
	notes		4-Exit Ticket			
	Standard (write out):	Compare and	Standards Based Materials & Resources:	Teacher	Exit Ticket-Does	Think-Pair-Share
T	<b>6-PS4-2</b> Develop and	contrast	FNT Sound Notes SLIDES: GO TO SLIDE #	observation	sound that is loud	
H	use a model to describe		□ Sound FNT Notes		have more	Exit Ticket
U	how waves are			Exit Ticket	energy or less?	
R	reflected, absorbed, or	Compare/Contrast	Sound FNT Notes:			Sentence Starters
S	transmitted through	<u>Ideas</u>	Sound FNT Notes.pdf		(more)	Word Banks
D	various materials.		Sound I'VI Notes.pai			Word Barks
A		Think-pair-share to	Sound Word Search			Visual Aids
Y	Learning Objective	talk about their	Southa Word Sedicii			
	Learning Objective Skill (what), Content	answers	Contout (Academic Veschulemu			
	(why), Product (how):		Content/Academic Vocabulary:			
			Reflection, refraction, transmission, absorption,			
			medium, amplitude, barrier, bend, frequency,			

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

Learning Objective Skill (what), Content (why), Product (how): I can reinforce my understanding of waves by reviewing key concepts as a class.	talk about their answers	Small Group, Preferential Seating, Sentence Stems, Visual Aids, Word Banks, Pre-teach Vocab, Chunked Assignments  Opportunities to SWRL: S- collaboration on lab W- lab document, FNT notes, R- FNT notes L- quick review, costas q's Costa's Levels of Thinking/Questioning: 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?		
		Class Structure:  1-Begin with Scholar Starter  2-Review Quiz concepts as a class		