



40 Years of Inspiring, Educating, Connecting.

Technology Integration Workshop 2016

Unit Title: Science of Sound and Light

Grade Level: 6th

Subject Area: Science

Duration/Length/Number of class periods: 12 days

**Description: Sound and Light unit for 6th grade Science
Power standards/ curriculum map for 6th grade Science**

https://docs.google.com/document/d/1uvccGNktTOldnFq0rMovx8XtwUeYs_NHSDDrUMAmK0k/edit

Established Goals (National, State, Local): <http://education.state.mn.us/MDE/EdExc/StanCurri/K-12AcademicStandards/Science/index.htm>

6.2.3.1.1: Students will describe properties of waves, including speed, wavelength, frequency and amplitude.

What Enduring Understandings are desired?

Explaining the three types of mechanical waves: transverse waves, longitudinal waves, and surface waves.

What Essential Questions will be considered?

What are waves?

Students will know / be able to:

- Explain what causes mechanical waves.
- List and describe three types of mechanical waves.
- Describe the basic properties of waves.
- Explain how a wave's speed is related to its wavelength and frequency.
- Describe how reflection, refraction, and diffraction change a wave's direction.
- State the different types of interference.
- Explain how standing waves form.

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Description	For mati ve	Sum mati ve	Intro ducto ry Activ ity	Learn ing Activ ity	Stude nt Techn ology Used	Te ac he r Te ch no lo gy Us ed	ISTE Stan dard s
Lesson 1.1,1.2,1.3 I have a formative assessment,quizzes for each lesson and a summative assessment for this chapter.	3	1	3				1,2,4,6
Textbook is available online with: Pearson Successnet.com log in to complete their assignments.					x		
10 Labs, experiments, activities for Lessons 1.1,1.2,1.3 ,				10			
Videos of waves. 1.1 GCSE Science Revision - Types of Waves , 1.2 Physics - Waves in the Real World: Properties of 3D Waves 1.3 Physics Lesson: Wave Interactions	1					x	

Materials, tools and resources: Pearson Successnet Website, Ipad, Chromebook, laptop, available blackline masters, videos
Unit Plan Author (name, school and optional email address or hyperlink to teacher's web page) Doug Dooyema, Luverne Middle School, grade 6, http://dooyema.weebly.com/
Additional credit given to

¹ "GCSE Science Revision - Types of Waves - YouTube." 2012. 4 Aug. 2016 <<https://www.youtube.com/watch?v=w2s2fZr8sqQ>>