

Science Unit Map – Grade 3– Trimester 3

Trimester Focus:

- Light and Sound

Big Ideas:

- Light and sound are forms of energy.
- Light and sound can be described by their properties.
- Light travels in a straight path.
- Vibrations produce sound.

GLCEs	Vocabulary	Resources (See Curriculum Calendar for Details)	Assessment
<p>- <i>Identify light and sound as forms of energy. (P.EN.03.11)</i></p> <p>- <i>Demonstrate that light travels in a straight line and that shadows are made by placing an object in a path of light. (P.EN.03.21)</i></p> <p>- <i>Describe what happens to light when it travels from water to air (a straw half in water and half in the air looks bent). (P.EN.03.22)</i></p> <p>- <i>Relate sounds to their sources of vibrations (for example: a musical note produced by a vibrating guitar string, the sounds of a drum made by the vibrating drum head). (P.EN.03.31)</i></p> <p>- <i>Distinguish the effect of fast or slow vibrations as pitch. (P.EN.03.32)</i></p> <p>- <i>Demonstrate how some materials are heated more than others by light that shines on them. (P.PM.03.51)</i></p> <p>- <i>Explain how we need light to see objects: light from a source reflects off objects and enters our eyes. (P.PM.03.52)</i></p> <p>*See inquiry and reflection GLCE's*</p>	<p>light path of light sound sound source light source forms of energy vibrations thermometer degrees Celsius light absorption light reflection shadow pitch sun as a source of energy effect</p>	<p>Textbook: National Geographic - Physical Science</p> <ul style="list-style-type: none"> - Chapter 4 Lesson 4 (Sound) - Chapter 5 (Light) <p>Inquiry Book</p> <ul style="list-style-type: none"> - See Inquiry Book for student investigations <p>Suggested Trade Books:</p> <ul style="list-style-type: none"> - <i>Bear Shadow</i> by Frank Asch - <i>Day Light, Night Light (Let's Read and Find Out Series 2)</i> by Franklyn M. Branley - <i>Hear! Hear! The Science of Sound</i> by Barbara Taylor - <i>Light and Sound (Kingfisher You Knowledge)</i> by Mike Goldsmith - <i>Making Musical Things</i> by Ann Wiseman and Ann Wiseman - <i>Rubber-Band Banjos and a Java Jive Bass</i> by Alex Sabbeth - <i>Shadow Magic</i> by Seymour Simon - <i>Sounds All Around (Let's Read and Find Out Series 1)</i> by Wendy Pfeffer - <i>The Magic School Bus In The Haunted Museum/House</i> by Joanna Cole - <i>Ty's One-man Band</i> by Mildred Walter and Margot Tomes <p>Websites, Video Streaming, & Smart Board Activities:</p> <ul style="list-style-type: none"> - myNGconnect.com - See grade level resource packet <p>Grade Level Resource Packet</p> <ul style="list-style-type: none"> - See unit: Light and Sound 	<p>Light:</p> <p>Formative:</p> <ul style="list-style-type: none"> -Monitor discussions on light for student understanding. -Check student lab books or science journals for understanding. Do students make predictions based on previous experience? Are students demonstrating increased application of previous observations to new experiences? Are students making connections? <p>Summative:</p> <ul style="list-style-type: none"> -Predict and draw the shape of a shadow based on the object and the source of light. -Draw a picture of how a pencil would look when dropped into a glass/cup of water. Students explain in writing why the pencil looks as it does. <p>Sound</p> <p>Formative:</p> <ul style="list-style-type: none"> -Monitor discussion on sound for student understanding. -Check student lab books or science journals for understanding. Do students make predictions based on previous experience? Are students demonstrating increased application of previous observations to new experiences? Are students making connections? <p>Summative:</p> <ul style="list-style-type: none"> -Create a concept map that shows the concepts of sound. <p>*Refer to companion document for more "Evaluate Student Understanding" information.</p>