

Light & Sound Energy Learning Goals:

Goal #	Learning Goal	Goal	Quiz	New Goal	Test
1	<p>I can explain the difference between longitudinal and transverse waves.</p> <ul style="list-style-type: none"> ★ This means I can draw a diagram of both types of waves and label the crest, trough, wavelength, and amplitude. ★ This means I can explain the difference between longitudinal (sound) waves and transverse (light/radiation) waves. 				
2	<p>I can describe how sound energy is transferred by wave-like disturbances that spread away from the source through a medium by particle-to-particle interaction.</p> <ul style="list-style-type: none"> ★ This means I can define and give examples of a medium. ★ This means I can describe how sound energy is transferred. ★ This means I can predict how the properties of the medium (e.g., air, water, empty space, rock) affect the speed of sound waves. ★ This means that I can describe how changes in energy cause changes in loudness (amplitude) and pitch (frequency) of a sound and the correct units (hertz, decibels). 				
3	<p>I can describe the different forms of radiation on the Electromagnetic Spectrum.</p> <ul style="list-style-type: none"> ★ This means that I can label the different forms of radiation on the spectrum. ★ This means I can describe the different forms of radiation in terms of their energy and uses. ★ This means I can identify sources of visible light and describe evidence that visible light travels in a straight line. 				
4	<p>I can describe the behavior of visible light when reflected or refracted.</p> <ul style="list-style-type: none"> ★ This means that I can predict whether a reflection will be diffused or regular when reflecting off a dull, smooth, rough, and/or shiny surface. ★ This mean I understand the meaning of refraction and why it occurs. ★ This means I can compare the way light refracts through different materials. ★ This means I can describe how transparent, translucent, and opaque surfaces affect the behavior of light. ★ This means I can describe how convex and concave lenses affect the behavior of light and the resulting image. 				
5	<p>I can describe receivers of visible light energy and their function.</p> <ul style="list-style-type: none"> ★ This means I can label the parts of the eye and know their function. ★ This means I can recognize and explain that an object is “seen” only when the object emits or reflects light to the eye. ★ I recognize differences in wavelength of visible light are perceived as differences in color by the human eye. ★ This means I can describe a photocell and give examples. 				