



<b>Science Grade 4</b> <b>Physical Science: Light (LI)</b>					
<b>Outcome</b>		<b>1 – Little Evidence</b> With help, I understand parts of the simpler ideas and do a few of the simpler skills.	<b>2 – Partial Evidence</b> I understand the simpler ideas and can do the simpler skills. I am working on the more complex ideas and skills.	<b>3 – Sufficient Evidence</b> I understand the more complex ideas and can master the complex skills that are taught in class. <b>I achieve the outcome.</b>	<b>4- Extensive Evidence</b> I have a deep understanding of the complex ideas, and I can use the skills I have learned in situations that were not taught in class.
<b>LI4.1</b> <b>Investigate the characteristics and physical properties of natural and artificial sources of light in the environment.</b>	Natural	• I can carry out processes to identify <b>some</b> of the characteristics <b>OR</b> physical properties of natural light in the environment, <b>with help</b> .	• I can carry out simple processes with <b>some accuracy</b> to identify <b>some</b> of the characteristics <b>OR</b> physical properties of natural light in the environment.	• I can carry out processes accurately to identify <b>many</b> characteristics <b>AND</b> physical properties of natural light in the environment.	• I can design and carry out a process to show a particular characteristic <b>OR</b> physical property of natural light in the environment.
	Artificial	• I can carry out processes to identify <b>some</b> characteristics <b>OR</b> physical properties of artificial light in the environment, <b>with help</b> .	• I can carry out simple processes with <b>some accuracy</b> to identify <b>some</b> characteristics <b>OR</b> physical properties of artificial light in the environment.	• I can carry out processes accurately to identify <b>many</b> characteristics <b>AND</b> physical properties of artificial light in the environment.	• I can design and carry out a process to show a particular characteristic <b>OR</b> physical property of artificial light in the environment.
Comments					



<b>Science Grade 4</b> <b>Physical Science: Light (LI)</b>				
<b>Outcome</b>	<b>1 – Little Evidence</b> With help, I understand parts of the simpler ideas and do a few of the simpler skills.	<b>2 – Partial Evidence</b> I understand the simpler ideas and can do the simpler skills. I am working on the more complex ideas and skills.	<b>3 – Sufficient Evidence</b> I understand the more complex ideas and can master the complex skills that are taught in class. <b>I achieve the outcome.</b>	<b>4- Extensive Evidence</b> I have a deep understanding of the complex ideas, and I can use the skills I have learned in situations that were not taught in class.
<b>LI4.2</b> <b>Analyze how light interacts with different objects and materials to create phenomena such as shadows, reflection, refraction, and dispersion.</b>	<ul style="list-style-type: none"> <li>• I can classify opaque, transparent, and translucent materials.</li> <li>• I can identify shadows, reflection, refraction, <b>OR</b> dispersion as light interacts with different objects.</li> <li>• <b>With help,</b> I can demonstrate how light interacts with various objects.</li> </ul>	<ul style="list-style-type: none"> <li>• I can <b>classify</b> opaque, transparent, and translucent materials and <b>explain some of the differences.</b></li> <li>• I can <b>identify</b> shadows, reflection, refraction, <b>OR</b> dispersion as light interacts with different objects, and <b>explain some of the differences.</b></li> <li>• I can <b>demonstrate</b> how light interacts with various objects.</li> </ul>	<ul style="list-style-type: none"> <li>• I can <b>classify and explain the differences</b> between opaque, transparent, and translucent materials.</li> <li>• I can <b>classify and explain the difference</b> between shadows, reflection, refraction, and dispersion as light interacts with different objects.</li> <li>• I can <b>demonstrate and explain</b> how light interacts with various objects.</li> </ul>	<ul style="list-style-type: none"> <li>• I can <b>compare how light interacts</b> with opaque, transparent, and translucent objects.</li> <li>• I can <b>compare</b> how light interacts with different objects to create shadows, reflections, refractions, and dispersion of light.</li> <li>• I can <b>demonstrate a few practical applications</b> of how light interacts with various objects.</li> </ul>
Comments				



<b>Science Grade 4</b> <b>Physical Science: Light (LI)</b>					
<b>Outcome</b>		<b>1 – Little Evidence</b> With help, I understand parts of the simpler ideas and do a few of the simpler skills.	<b>2 – Partial Evidence</b> I understand the simpler ideas and can do the simpler skills. I am working on the more complex ideas and skills.	<b>3 – Sufficient Evidence</b> I understand the more complex ideas and can master the complex skills that are taught in class. <b>I achieve the outcome.</b>	<b>4- Extensive Evidence</b> I have a deep understanding of the complex ideas, and I can use the skills I have learned in situations that were not taught in class.
<b>LI4.3</b> <b>Assess personal, societal, and environmental impacts of light-related technological innovations including optical devices.</b>	<b>Personal impact</b>	<ul style="list-style-type: none"> <li>I can identify a <b>few</b> positive and negative impacts of light-related technological innovations on people.</li> </ul>	<ul style="list-style-type: none"> <li>I can identify <b>some positive and negative impacts</b> of light-related technological innovations, <b>including optical devices</b>, on people.</li> </ul>	<ul style="list-style-type: none"> <li>I can <b>explain the positive and negative impacts of light-related technological innovations</b>, including optical devices, <b>on people.</b></li> </ul>	<ul style="list-style-type: none"> <li>I can <b>recommend a light-related technological innovation</b> for my own use, <b>with examples and details for support.</b></li> </ul>
	<b>Societal impact</b>	<ul style="list-style-type: none"> <li>I can identify a <b>few</b> positive and negative impacts of light-related technological innovations on society.</li> </ul>	<ul style="list-style-type: none"> <li>I can identify <b>some positive and negative impacts</b> of light-related technological innovations <b>including optical devices</b> on society.</li> </ul>	<ul style="list-style-type: none"> <li>I can explain the positive and negative impacts of light-related technological innovations <b>including optical devices on society.</b></li> </ul>	<ul style="list-style-type: none"> <li>I can <b>recommend a light-related technological innovation</b> for use in society, with examples and details for support.</li> </ul>
	<b>Environmental Impact</b>	<ul style="list-style-type: none"> <li>I can identify a <b>few</b> positive and negative impacts of light-related technological innovations on the environment.</li> </ul>	<ul style="list-style-type: none"> <li>I can identify <b>some positive and negative impacts</b> of light-related technological innovations <b>including optical devices</b> on the environment.</li> </ul>	<ul style="list-style-type: none"> <li>I can explain the positive and negative impacts of light-related technological innovations <b>including optical devices on the environment.</b></li> </ul>	<ul style="list-style-type: none"> <li>I can <b>recommend a light-related technological innovation</b> for use in the environment with minimal negative impact, with examples and details for support.</li> </ul>
Comments					