


# Three Dimensional Learning Plan: 1-PS4-2

Grade Level: **First Grade**

Title		Phenomenon/Problem	
Designed by		Course(s)	
Brief Learning Description			






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Desired Results			
Performance Expectation(s)			
<b>1-PS4-2: Illumination and Darkness</b> Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated. (Cause and Effect)			
Summative Assessment			
Assessment: <a href="#">Phone in the Refrigerator</a>  1-PS4-2: <a href="#">Evidence Statement</a>			
What skills (practices) will students need to learn?	What thinking concepts will students need to learn?	What science concepts will students need to learn?	What relevant or local phenomenon can be used to teach these concepts?
Gather evidence from a phenomenon Claim Evidence Reasoning  *mini lessons	Cause and effect Observable pattern  *mini lessons	Illuminate Darkness	Dryer light Enclosed hands Box








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Activity 1			
 <p>Phenomenon or Problem</p>	 <p><b>What will they do?</b> The three dimensions woven together into a single learning performance.</p>	 <p><b>Why is this important?</b> How does this activity help build understanding of the anchoring phenomenon.</p>	 <p><b>How will they do it?</b> Graphic organizers, protocols, scaffolds, labs, mini-lesson, student discourse, etc.</p>
 <p><b>Formative Assessment</b> What information are you collecting to know that they met the target?</p>			

Activity 2			
 <p>Phenomenon or Problem</p>	 <p><b>What will they do?</b> The three dimensions woven together into a single learning performance.</p>	 <p><b>Why is this important?</b> How does this activity help build understanding of the anchoring phenomenon.</p>	 <p><b>How will they do it?</b> Graphic organizers, protocols, scaffolds, labs, mini-lesson, student discourse, etc.</p>
 <p><b>Formative Assessment</b> What information are you collecting to know that they met the target?</p>			

Activity 3			
 <p>Phenomenon or Problem</p>	 <p><b>What will they do?</b> The three dimensions woven together into a single learning performance.</p>	 <p><b>Why is this important?</b> How does this activity help build understanding of the anchoring phenomenon.</p>	 <p><b>How will they do it?</b> Graphic organizers, protocols, scaffolds, labs, mini-lesson, student discourse, etc.</p>
 <p><b>Formative Assessment</b> What information are you collecting to know that they met the target?</p>			



Activity 4			
 <p><b>Phenomenon or Problem</b></p>	 <p><b>What will they do?</b> The three dimensions woven together into a single learning performance.</p>	 <p><b>Why is this important?</b> How does this activity help build understanding of the anchoring phenomenon.</p>	 <p><b>How will they do it?</b> Graphic organizers, protocols, scaffolds, labs, mini-lesson, student discourse, etc.</p>
 <p><b>Formative Assessment</b> What information are you collecting to know that they met the target?</p>			

Activity 5			
 <p><b>Phenomenon or Problem</b></p>	 <p><b>What will they do?</b> The three dimensions woven together into a single learning performance.</p>	 <p><b>Why is this important?</b> How does this activity help build understanding of the anchoring phenomenon.</p>	 <p><b>How will they do it?</b> Graphic organizers, protocols, scaffolds, labs, mini-lesson, student discourse, etc.</p>
 <p><b>Formative Assessment</b> What information are you collecting to know that they met the target?</p>			
 <p><b>Summative Assessment</b> What information are you collecting to know that they met the target?</p>			



## Materials / Resources

### **Vocabulary**

Darkness

Illumination

Object

Appearance (e.g. visible, not visible, somewhat visible)

Light

- External light source (e.g. sun, flashlight)
- Internal light source (e.g. light bulb, glow stick)

Cause and Effect

### **Mini Lessons**

[Causation Level 2 - Testing Causes Mini-Lesson](#)

[Causation Level 2 - Testing Causes Thinking Slides](#)

### **Graphic Organizers**

[The Effect of Light Graphic Organizer \(Student Version\)](#)

[The Effect of Light Graphic Organizer \(Teacher Version\)](#)

[Phenomena Observation Graphic Organizer](#)

[Questioning Graphic Organizer](#)

[Modeling Graphic Organizer](#)

[Planning an Investigation Organizer](#)

[Investigation Evidence Organizer](#)

[Engaging in Argumentation Organizer](#)

