

# Science Unit Study Tool

## Step 1: Sensemaking with the Standards

Dive deeply into the three dimensions of the unit performance expectations and how students use these to build knowledge about the phenomenon across the unit.

**Anchor Phenomenon:** *Engage with the Anchor from the student lens*

<p><b>Anchor Phenomenon:</b> <i>Engage with the Anchor from the student lens</i></p>				
<p><b>Initial Phenomenon Exploration:</b> <i>How are students initially exploring the phenomenon?</i></p>				
<p><b>Unit Sensemaking</b> <i>What do students first figure out about the phenomenon? What do they continue to figure out as the unit continues?</i></p>	<p><b>Incremental Checkpoint 1:</b> <i>How are students initially engaging with the phenomenon?</i></p>	<p><b>Incremental Checkpoint 2:</b> <i>What new information are students adding to their understanding of the phenomenon?</i></p>	<p><b>Incremental Checkpoint 3:</b> <i>What new information are students adding to their understanding of the phenomenon?</i></p>	<p><b>Incremental Checkpoint 4:</b> <i>What new information are students adding? How are they synthesizing learning from the whole unit?</i></p>

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**Louisiana Student Standards for Science:** Complete one row for each performance expectation addressed in the unit. Use [Appendix A](#) to determine how students engage with each dimension in previous and future grade bands.

	Performance Expectation	How have students engaged with this SEP in the previous grade band(s)? What will they need to do at the current grade band?	How have students engaged with this DCI in the previous grade band(s)? What will they need to do at the current grade band?	How have students engaged with this CCC in the previous grade band(s)? What will they need to do at the current grade band?
<b>Three-Dimensional Breakdown:</b> What Performance Expectations will students be engaging with in this unit?				

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## Step 2: Phenomenon-Based Learning for Science within a Unit

Phenomenon-based learning allows students to make sense of the three dimensions of the Louisiana Student Standards for Science.

Planning Focus	Planning Considerations	Notes/Instructional Decisions
<b>Make Sense of the Phenomenon and Develop Questions</b>	<ul style="list-style-type: none"> <li>• What might students ask about the phenomenon?</li> <li>• How do these connect to the performance expectations?</li> </ul>	
<b>Prior Knowledge and Competing Ideas</b>	<ul style="list-style-type: none"> <li>• What opportunities do students have to bring prior knowledge to the learning?</li> <li>• What teacher moves support competing ideas that may arise, and how will these be addressed?</li> </ul>	
<b>Identify Related Phenomenon</b>	<ul style="list-style-type: none"> <li>• Are there phenomena in your area or that students may be familiar with that relate to the unit phenomenon?</li> <li>• How can these related phenomena be used to help students make broader connections to transfer ideas?</li> </ul>	

### Step 3: Trace Student Sensemaking Through Assessments

Example the major assessment opportunities within the unit and unpack the three dimensions students will need to be proficient in to be successful on these assessments.

Location in Unit <i>(i.e., after lesson 3.3)</i>	Assessment Task and Aligned Standard <i>(Complete the task as a student, then review curriculum exemplar responses)</i>	SEP Assessed	DCI Assessed	CCC Assessed

For each assessment task, consider:

- How deep should student understanding of the standards be at this point in the unit?
- What common competing ideas show up in student responses?
- What are the implications for future learning based on student work analysis?
- What is the plan for responding to individual student needs for just-in-time support or enrichment?