

Strong science instruction requires that students:

- Apply content knowledge to explain real world phenomena and to design solutions,
- Investigate, evaluate, and reason scientifically, and
- Connect ideas across disciplines.

Title: **[Title]**

Grade/Course: **[Grade/Course]**

Publisher: **[Publisher]**

Copyright: **[Copyright]**

Overall Rating: Choose an item.

**Tier I, Tier II, Tier III** Elements of this review:

STRONG	WEAK
Choose an item.	Choose an item.
Choose an item.	Choose an item.
Choose an item.	Choose an item.
Choose an item.	Choose an item.
Choose an item.	Choose an item.
Choose an item.	Choose an item.
Choose an item.	Choose an item.
Choose an item.	Choose an item.

To evaluate instructional materials for alignment with the standards and determine tiered rating, begin with **Section I: Non-negotiable Criteria**.

- Review the **required**<sup>1</sup> Indicators of Superior Quality for each **Non-negotiable** criterion.
- If there is a “Yes” for all **required** Indicators of Superior Quality, materials receive a “Yes” for that **Non-negotiable** criterion.
- If there is a “No” for any of the **required** Indicators of Superior Quality, materials receive a “No” for that **Non-negotiable** criterion.
- Materials must meet **Non-negotiable** Criteria 1 and 2 for the review to continue to **Non-negotiable** Criteria 3 and 4. Materials must meet all of the **Non-negotiable** Criteria 1-4 in order for the review to continue to Section II.
- If materials receive a “No” for any **Non-negotiable** criterion, a rating of Tier 3 is assigned, and the review does not continue.

If all Non-negotiable Criteria are met, then continue to **Section II: Additional Criteria of Superior Quality**.

- Review the **required** Indicators of Superior Quality for each criterion.
- If there is a “Yes” for all **required** Indicators of Superior Quality, then the materials receive a “Yes” for the additional criteria.
- If there is a “No” for any **required** Indicator of Superior Quality, then the materials receive a “No” for the additional criteria.

**Tier 1 ratings** receive a “Yes” for all Non-negotiable Criteria and a “Yes” for each of the Additional Criteria of Superior Quality.  
**Tier 2 ratings** receive a “Yes” for all Non-negotiable Criteria, but at least one “No” for the Additional Criteria of Superior Quality.  
**Tier 3 ratings** receive a “No” for at least one of the Non-negotiable Criteria.

<sup>1</sup> **Required Indicators of Superior Quality** are labeled “Required” and shaded yellow. Remaining indicators that are shaded white are included to provide additional information to aid in material selection and do not affect tiered rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<b>SECTION I: NON-NEGOTIABLE CRITERIA OF SUPERIOR QUALITY</b> Materials must meet Non-negotiable Criteria 1 and 2 for the review to continue to Non-negotiable Criteria 3 and 4. Materials must meet all of the Non-negotiable Criteria 1-4 in order for the review to continue to Section II.			
<b>Non-negotiable</b> <b>1. THREE-DIMENSIONAL LEARNING:</b> Students have multiple opportunities throughout each unit to develop an understanding and demonstrate application of the three dimensions.  <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Required</b> <b>1a)</b> Materials are designed so that students develop scientific content knowledge and scientific skills through <b>interacting with the three dimensions</b> of the science standards. The majority of the materials <b>engage students</b> in integrating the science and engineering practices (SEP), crosscutting concepts (CCC), and disciplinary core ideas (DCI) to support deeper learning.	Choose an item.	Click or tap here to enter text.
<b>Non-negotiable</b> <b>2. PHENOMENON-BASED INSTRUCTION:</b> Explaining phenomenon and designing solutions drive student learning.  <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Required</b> <b>2a) Observing and explaining phenomena</b> and designing solutions provide the purpose and opportunity for students to engage in a coherent sequence of learning a majority of the time. Phenomena provide students with authentic opportunities to ask questions and define problems, as well as purpose to incrementally build understanding through the lessons that follow.	Choose an item.	Click or tap here to enter text.
	<b>Required</b> <b>2b)</b> Materials are designed to provide sufficient opportunities for students to <b>design and engage in investigations at a level appropriate to their grade band</b> to explain phenomena. This includes testing theories or models, generating data, and using reasoning and scientific ideas to provide evidence to support claims.	Choose an item.	Click or tap here to enter text.

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	<b>2c)</b> Materials provide frequent opportunities for students to <b>make meaningful connections</b> to their own knowledge and experiences as well as those of their community during sense-making about the phenomena.	Choose an item.	Click or tap here to enter text.
<p><b>Non-negotiable (only reviewed if Criteria 1 and 2 are met)</b></p> <p><b>3. ALIGNMENT &amp; ACCURACY:</b> Materials adequately address the <a href="#">Louisiana Student Standards for Science</a>.</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>Required</b> <b>3a)</b> The majority of the Louisiana Student Standards for Science are incorporated, to the full <b>depth of the standards</b>.</p>	Choose an item.	Click or tap here to enter text.
	<p><b>Required</b> <b>3b)</b> The total amount of content is <b>viable</b> for a school year.</p>	Choose an item.	Click or tap here to enter text.
	<p><b>Required</b> <b>3c)</b> Science content is <b>accurate</b>, reflecting the most current and widely accepted explanations.</p>	Choose an item.	Click or tap here to enter text.
	<p><b>3d)</b> In any one grade or course, instructional materials spend <b>minimal time on content outside</b> of the course, grade, or grade-band.</p>	Choose an item.	Click or tap here to enter text.
<p><b>Non-negotiable (only reviewed if Criteria 1 and 2 are met)</b></p> <p><b>4. DISCIPLINARY LITERACY:</b> Materials have students engage with authentic sources and incorporate speaking, reading, and writing to develop scientific literacy.</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>Required *Indicator for grades 4-12 only</b> <b>4a)</b> Students regularly engage with <b>authentic sources</b> that represent the language and style that is used and produced by scientists; e.g., journal excerpts, authentic data, photographs, sections of lab reports, and media releases of current science research. Frequency of engagement with authentic sources should increase in higher grade levels and courses.</p>	Choose an item.	Click or tap here to enter text.
	<p><b>Required</b> <b>4b)</b> Students regularly engage in <b>speaking and writing</b> about scientific phenomena and engineering solutions using authentic science sources; e.g., authentic data, models, lab investigations, or journal excerpts. Materials address the necessity of using <b>scientific evidence</b> to support scientific ideas.</p>	Choose an item.	Click or tap here to enter text.

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	<p><b>Required</b>  <b>4c)</b> There is <b>variability</b> in the tasks that students are required to execute. For example, students are asked to produce solutions to problems, models of phenomena, explanations of theory development, and conclusions from investigations.</p>	Choose an item.	Click or tap here to enter text.
	<p><b>Required</b>  <b>4d)</b> Materials provide a coherent sequence of learning experiences that <b>build scientific vocabulary</b> and knowledge over the course of study. Vocabulary is addressed as needed in the materials but not taught in isolation of deeper scientific learning.</p>	Choose an item.	Click or tap here to enter text.
<b>Section II: Additional Criteria of Superior Quality</b>			
<p><b>5. LEARNING PROGRESSIONS:</b>  The materials adequately address <a href="#">Appendix A: Learning Progressions</a>. They are coherent and provide natural connections to other performance expectations including science and engineering practices, crosscutting concepts, and disciplinary core ideas; the content complements the <a href="#">Louisiana Student Standards for Math</a>.</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>Required</b>  <b>5a)</b> The overall organization of the materials and the development of disciplinary core ideas, science and engineering practices, and crosscutting concepts are coherent within and across units. The <b>progression of learning</b> is coordinated over time, clear, and organized to prevent student misunderstanding and supports student mastery of the performance expectations.</p>	Choose an item.	Click or tap here to enter text.
	<p><b>5b)</b> Students apply mathematical thinking when applicable. They are not introduced to math skills that are beyond the applicable grade’s expectations in the Louisiana Student Standards for Mathematics. Preferably, <b>math connections</b> are made explicit through clear references to the math standards, specifically in teacher materials.</p>	Choose an item.	Click or tap here to enter text.
<p><b>6. SCAFFOLDING AND SUPPORT:</b>  Materials provide teachers with guidance to build their own knowledge and to give all students extensive opportunities and</p>	<p><b>Required</b>  <b>6a)</b> There are separate <b>teacher support</b> materials including: scientific background knowledge, support in three-dimensional learning, learning progressions, common student misconceptions and suggestions to</p>	Choose an item.	Click or tap here to enter text.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>support to explore key concepts using multiple, varied experiences to build scientific thinking.</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p>address them, guidance targeting speaking and writing in the science classroom (e.g. conversation guides, sample scripts, rubrics, exemplar student responses). Support also includes teacher guidance in the materials' <b>approach to phenomenon based instruction</b> and provides explicit guidance on how the materials address, build, and <b>integrate the three dimensions</b>.</p>		
	<p><b>Required 6b)</b> Teacher support materials include guidance to ensure that students experience phenomena, design solutions, and apply scientific knowledge and skills in such a way that is <b>developmentally appropriate</b>.</p>		
	<p><b>Required 6c)</b> Support for <b>English Learners and diverse learners</b> is provided. Appropriate suggestions and materials are provided for <b>supporting varying student needs</b> at the unit and lesson level. The language in which questions and problems are posed is not an obstacle to understanding the content, and if it is, additional supports are included (e.g., alternative teacher approaches, pacing and instructional delivery options, strategies or suggestions for supporting access to text and/or content, suggestions for modifications, suggestions for vocabulary acquisition , etc.).</p>	Choose an item.	Click or tap here to enter text.
<p><b>7. USABILITY:</b> Materials are easily accessible, promote safety in the science classroom, and are viable for implementation given the length of a school year.</p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>Required 7a)</b> Text sets (when applicable), laboratory, and other scientific materials are <b>readily accessible</b> through vendor packaging.</p>	Choose an item.	Click or tap here to enter text.
	<p><b>Required 7b)</b> Materials help students build an understanding of standard operating procedures in a science laboratory and include <b>safety</b> guidelines, procedures, and equipment. Science classroom and laboratory safety guidelines are embedded in the curriculum.</p>	Choose an item.	Click or tap here to enter text.

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<b>8. ASSESSMENT:</b> Materials offer assessment opportunities that genuinely measure progress and elicit direct, observable evidence of the degree to which students can independently demonstrate the assessed standards.  <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Required 8a) Multiple types</b> of formative and summative assessments (performance-based tasks, questions, research, investigations, and projects) are embedded into content materials and assess the learning targets.	Choose an item.	Click or tap here to enter text.
	<b>Required 8b)</b> Assessment items and tasks are structured on integration of the <b>three dimensions</b> and include opportunities to engage students in applying understanding to new contexts.	Choose an item.	Click or tap here to enter text.
	<b>8c) Scoring</b> guidelines and rubrics <b>align</b> to performance expectations, and incorporate criteria that are specific, observable, and measurable.	Choose an item.	Click or tap here to enter text.
<b>FINAL EVALUATION</b> <i>Tier 1 ratings</i> receive a “Yes” for all Non-negotiable Criteria and a “Yes” for each of the Additional Criteria of Superior Quality. <i>Tier 2 ratings</i> receive a “Yes” for all Non-negotiable Criteria, but at least one “No” for the Additional Criteria of Superior Quality. <i>Tier 3 ratings</i> receive a “No” for at least one of the Non-negotiable Criteria.			
<b>Compile the results for Sections I and II to make a final decision for the material under review.</b>			
Section	Criteria	Yes/No	Final Justification/Comments
<b>I: Non-negotiable Criteria of Superior Quality<sup>2</sup></b>	1. Three-dimensional Learning	Choose an item.	Click or tap here to enter text.
	2. Phenomenon-Based Instruction	Choose an item.	Click or tap here to enter text.
	3. Alignment & Accuracy	Choose an item.	Click or tap here to enter text.
	4. Disciplinary Literacy	Choose an item.	Click or tap here to enter text.
<b>II: Additional Criteria of Superior Quality<sup>3</sup></b>	5. Learning Progressions	Choose an item.	Click or tap here to enter text.

<sup>2</sup> Must score a “Yes” for all Non-negotiable Criteria to receive a Tier I or Tier II rating.

<sup>3</sup> Must score a “Yes” for all Additional Criteria of Superior Quality to receive a Tier I rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	6. Scaffolding and Support	Choose an item.	Click or tap here to enter text.
	7. Usability	Choose an item.	Click or tap here to enter text.
	8. Assessment	Choose an item.	Click or tap here to enter text.
FINAL DECISION FOR THIS MATERIAL: Choose an item.			