

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 one: Tier I, Exemplifies quality; Tier II, Approaching quality; Tier III, Not representing quality]**

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

STRONG	WEAK

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria. If there is a “Yes” for all required indicators in Column 2, then the materials receive a “Yes” in Column 1. If there is a “No” for any required indicator in Column 2, then the materials receive a “No” in Column 1.

For Section II, begin by reviewing the required indicators in Column 2 for each criterion. If there is a “Yes” for all required indicators in Column 2, then the materials receive a “Yes” in Column 1. If there is a “No” for any required indicators in Column 2, then the materials receive a “No” in Column 1.

Tier 1 ratings receive a “Yes” in Column 1 for Criteria 1 – 7.

Tier 2 ratings receive a “Yes” in Column 1 for all non-negotiable criteria, but at least one “No” in Column 1 for the remaining criteria.

Tier 3 ratings receive a “No” in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.			
<p>Non-Negotiable 1. ALIGNMENT & ACCURACY: Materials adequately address the Louisiana Student Standards for Science. Explaining phenomenon and designing solutions drive student learning.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 1a) The majority of the Louisiana Student Standards for Science are incorporated, to the full depth of the standards.</p>		
	<p>REQUIRED 1b) Observing and explaining phenomenon and designing solutions provide the purpose and opportunity for students to engage in learning.</p>		
	<p>REQUIRED 1c) Science content is accurate, reflecting the most current and widely accepted explanations.</p>		
	<p>1d) In any one grade or course, instructional materials spend minimal time on content outside of the course, grade, or grade-band.</p>		
<p>Non-Negotiable 2. THREE-DIMENSIONAL LEARNING: Students have multiple opportunities throughout each unit to develop an understanding and demonstrate application of the three dimensions.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 2a) Materials teach the science and engineering practices, crosscutting concepts and disciplinary core ideas separately when necessary but they are most often integrated to support deeper learning. Assessment items and tasks are structured on integration of the three-dimensions.</p>		
	<p>2b) There is variability in the tasks that students are required to execute. For example, students are asked to produce solutions to problems, models of phenomena, arguments and explanations of theory development, and conclusions from investigations.</p>		
<p>Non-Negotiable 3. DISCIPLINARY LITERACY: Materials have students engage with authentic sources and incorporate speaking, reading, and</p>	<p>REQUIRED *Indicator for grades 4-12 only 3a) Students have multiple opportunities to engage with authentic sources that represent the language and style that is used and produced by scientists. Examples could include journal excerpts, authentic data, photographs,</p>		

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<p>writing to develop scientific literacy.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>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>		
	<p>REQUIRED 3b) Students regularly engage in speaking and writing about scientific phenomena and engineering solutions.</p>		
	<p>3c) Materials provide a coherent sequence of authentic science sources that build scientific vocabulary 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>		
	<p>3d) Materials address the necessity of using scientific evidence to support scientific ideas.</p>		
<p>Non-Negotiable 4. LEARNING PROGRESSIONS: Materials are coherent and provide natural connections to other performance expectations including science and engineering practices, crosscutting concepts, and disciplinary core ideas; the content compliment the major priorities of Louisiana Student Standards for Math.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 4a) The overall organization of the materials and the development of content skills and practices are coherent and support student mastery of the standards. The progression of learning is coordinated over time, clear and organized to prevent student misunderstanding.</p>		
	<p>4b) Materials are coherent, sequenced within and across units to build students’ depth of knowledge.</p>		
	<p>4c) 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, math connections are made explicit through clear references to the math standards, specifically in teacher materials.</p>		
SECTION II: ADDITIONAL INDICATORS OF QUALITY			
<p>Additional Criterion 5. SCAFFOLDING AND SUPPORT: Materials provide teachers with guidance to build their own</p>	<p>REQUIRED 5a) There are separate teacher support materials including: scientific background knowledge, support in three-dimensional learning, learning progressions,</p>		

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>knowledge and to give all students extensive opportunities and 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>common student misconceptions and suggestions to address them, guidance targeting speaking and writing in the science classroom (i.e. conversation guides, sample scripts, rubrics, exemplar student responses).</p> <p>5b) Appropriate suggestions and materials are provided for differentiated instruction supporting varying student needs at the unit and lesson level (e.g., alternative teaching approaches, pacing, instructional delivery options, suggestions for addressing common student difficulties to meet standards, etc.).</p>		
<p>Additional Criterion 6. USABILITY: 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>REQUIRED 6a) Text sets (when applicable), laboratory, and other scientific materials are readily accessible through vendor packaging.</p> <p>6b) Materials help students build an understanding of standard operating procedures in a science laboratory and include safety guidelines, procedures, and equipment. Science classroom and laboratory safety guidelines are embedded in the curriculum.</p> <p>6c) The total amount of content is viable for a school year.</p>		
<p>Additional Criterion 7. ASSESSMENT: 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.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 7a) Multiple types of formative and summative assessments (performance-based tasks, questions, research, investigations, and projects) are embedded into content materials and assess the learning targets.</p> <p>7b) Scoring guidelines and rubrics align to performance expectations, and incorporate criteria that are specific, observable, and measurable.</p>		

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
FINAL EVALUATION <i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 7. <i>Tier 2 ratings</i> receive a “Yes” in Column 1 for all non-negotiable criteria, but at least one “No” in Column 1 for the remaining criteria. <i>Tier 3 ratings</i> receive a “No” in Column 1 for at least one of the non-negotiable criteria.			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Alignment & Accuracy		
	2. Three-dimensional Learning		
	3. Disciplinary Literacy		
	4. Learning Progressions		
II: Additional Indicators of Quality	5. Scaffolding and Support		
	6. Usability		
	7. Assessment		
FINAL DECISION FOR THIS MATERIAL: [Choose one: Tier I, Exemplifies quality; Tier II, Approaching quality; Tier III, Not representing quality]			