Instructional Materials Evaluation Tool for Alignment in Science Grades K – 12 (IMET)

FULL CURRICULUM
Instructional Materials

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: **Living by Chemistry 2nd Edition**

Grade/Course: **Chemistry**

Publisher: **Bedford, Freeman, & Worth**

Copyright: **2015**

Overall Rating: **Tier III, Not representing quality**

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

STRONG	WEAK
	1. Alignment Accuracy (Non-Negotiable)
	2. Three-dimensional Learning (Non-Negotiable)
	3. Disciplinary Literacy (Non-Negotiable)
	4. Learning Progressions (Non-Negotiable)

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.			
Non-Negotiable **1. ALIGNMENT & ACCURACY:** Materials adequately address the Louisiana Student Standards for Science. Explaining phenomenon and designing solutions drive student learning. ☐ Yes ☒ No	**REQUIRED** **1a)** The majority of the Louisiana Student Standards for Science are incorporated, to the full **depth of the standards**.	**No**	The instructional materials do not fully address Louisiana Student Standards for Science Chemistry standards. Although some of the standards are partially addressed, 0% of LSSS Chemistry standards are fully addressed. The following are examples of instructional materials that do not fully address the disciplinary core ideas: • The energy expectations for high school chemistry standards HS-PS1-4, HS-PS1-5, HS-PS3-1, HS- PS3-3, HS-PS3-4 and HS-PS3-6 are either not present or not fully incorporated into the text or assessments. • Chapter 24 addresses standard HS-PS1-6. The standards emphasize application of Le Chatelier's Principles however, students are not asked to make connections between macro and micro levels and they are not asked to refine reaction systems. The following are examples of instructional materials that do not incorporate the standard's crosscutting concepts: • Standard HS-PS1-1 is partially addressed in the featured activity in Unit 1 Chapter 2 page 36 and Unit 2 Chapter 8. The materials introduce the crosscutting concept patterns, but most of the patterns are explicitly provided in the text. The materials do not allow students to independently develop and practice the skill of using patterns in science. • Standard HS-PS1-6 in Unit 6, Chapter 24 is partially addressed. The disciplinary core ideas are explained but the instructional materials do not prompt students to construct an explanation and refine the design of a chemical system, science and engineering practice. Without the opportunity for

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			students to construct their own explanations they will not be able to explore the crosscutting concept, stability and change, thoroughly. • Unit 5, Chapter 20, Lesson 106, the standard HS-PS1-5, apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs, is partially addressed. The disciplinary core idea about reaction rates are explained in the text but there is no opportunity for students to thoroughly explore patterns and construct explanations of different reactions. The following are examples of instructional materials that do not incorporate the science and engineering practices: • Unit 1 Chapter 3, Lessons 15 and 16 focus on standard HS-PS1-8, developing and using models of nuclear decay. The materials have pictures of nuclear decay and address the use of nuclear equations but there is no instruction or materials that lead students to develop and use models to explain nuclear processes. • Standard HS-PS1-3 is addressed in some detail in lesson 119 but only ion-dipole forces are incorporated into the materials. Standard HS-PS1-3 is partially addressed again in Unit 2, Chapter 8 and Unit 6, Chapter 23, Lesson 119. The materials do not prompt students to engage in the science and engineering practice, plan and conduct an investigation to compare structures. • Standard HS-PS3-1, create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known, is not fully addressed. There is no opportunity for students to create models using quantitative expressions.

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	REQUIRED **1b)** Observing and **explaining phenomenon** and **designing solutions** provide the purpose and opportunity for students to engage in learning.	**No**	Observing and explaining phenomenon and designing solutions do not provide the purpose and opportunity for students to engage in learning. The materials do not allow students to explore and try to make sense of phenomenon on the unit and lesson level. Phenomena used on the lesson level do not explicitly help students connect their learning to unit phenomena or understand why and how unit phenomena occurs in the real world. The crosscutting concepts and science and engineering practices are not used to engage students in phenomenon-based learning. Most disciplinary core ideas are provided for students as a direct text scenario. The following are examples of how phenomenon-based instruction is not adequately addressed in the instructional materials. • In Unit 5 phenomenon-based instruction is not used to drive classroom instruction, engage students in learning or help students understand the disciplinary core ideas, science and engineering practices and crosscutting concepts. On page 481 students are introduced to the basic process of fire combustion. The instructional materials do not help students deeply understand fire combustion or make sense of how and why fire combustion reactions take place. Students are not given the opportunity to develop models of energy changes that occur in combustion reactions or use models to make sense of fire combustion reactions as called for by standards HS-PS3-1 and HS-PS4-1. • Unit 4, Chapter 15, Lesson 81 on page 413 begins with a question comparing the effects of concentrated hydrochloric acid and diluted hydrochloric acid on a person's skin. The instructional materials do not incorporate any pictures or resources to help students further explore the effects of hydrochloric acid on a person's skin. Examples are given about concentration of dyes on pages 413 and 414, but the materials do not explicitly help students connect their understanding of dye concentrations to hydrochloric acid concentrations. Even though guiding questions are used at the beginning of each

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			lesson the materials rely heavily on students passively receiving knowledge instead of utilizing mathematical computations in real-world applications, standard HS-PS1-7. Students never revisit or deeply understand the impact that diluted and concentrated forms of hydrochloric acid have on a person's skin.
	REQUIRED **1c)** Science content is **accurate**, reflecting the most current and widely accepted explanations.	**No**	The majority of the science content is accurate and reflects the most current and accepted explanations. However, there are two areas that need to be updated. In Unit 2 page 24 there are now 118 known elements as of 2016. Unit 4, page 425 SDS sheets are used today instead of MSDS sheets.
	1d) In any one grade or course, instructional materials spend minimal time on content outside of the course, grade, or grade-band.	**No**	The instructional materials include content that is outside of the course and/or grade-band. The instructional materials are not always aligned to the high school learning progressions for the disciplinary core ideas and science and engineering practices. There are two examples where the science and engineering practices are aligned to the high school learning progressions but the disciplinary core ideas are not aligned to the high school progressions. • In Unit 2, Chapter 8 (determine how smell differs among different groups of people) and Unit 5, Chapter 19 (determine which snack transfers the most energy) students plan and conduct an experiment but these experiments are not aligned to high school Chemistry disciplinary core ideas. • The lab in Unit 5 is aligned to middle school disciplinary core ideas. • In Unit 5 the expectations for high school chemistry are not present. For example, Lessons 94-96 address MSPS3Bc and MSPS3Ae which are core ideas for middle school not high school. There are several examples where the science and engineering practices are not aligned to the high school learning progressions. The following are examples: • According to the LDOE high school learning progressions, students at this level should engage in more quantitative analysis and are tasked with

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			understanding concepts on a global scale. Unit 6, Chapter 23, Lesson 119, page 619 discuss dynamic equilibrium introducing students to the idea that process rates are equal when dynamic equilibrium has been reached; however, while Lessons 120 and 121 discuss the concept of condition-dependent balance between a reaction and the reverse reaction, the development of systematic trade-offs in the form of design solutions are not explored to the fullest potential. In Lesson 121 students calculate K, but are not asked to explore possibilities of changing reactants or products. • In Unit 2 Chapter 9 and Unit 5 Chapter 20, students develop a model but they don't evaluate or utilize the models in a real-world application.
Non-Negotiable **2. THREE-DIMENSIONAL LEARNING:** Students have multiple opportunities throughout each unit to develop an understanding and demonstrate application of the three dimensions. ☐ Yes ☒ No	**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**.	**No**	The instructional materials do not adequately address the three dimensions of learning. There are few opportunities for students to explore concepts through the crosscutting concepts or to engage in the science and engineering practices in any significant depth. The following are examples of instructional materials that do not fully address the crosscutting concepts and/or science and engineering practices: • Standard HS-PS3-1, plan and conduct an investigation to gather evidence to compare the structure of substances at the macro scale to infer the strength of electrical forces between particles, is not fully addressed in Unit 2. The science and engineering practices are not present for this standard and the crosscutting concept, patterns, is not thoroughly addressed. • In Unit 1, Chapter 3, Lesson 15 the disciplinary core idea for the standard HS-PS1-1 (fusion/fission/radioactive decay) is addressed on pages 71-75. Even though the students create a report including an explanation (with a simple drawing) of how electric power is produced from a nuclear power plant on page 293, it does not fulfill the science and engineering practices for developing and using models or allow students to explore the crosscutting concept, patterns.

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			• Unit 6, Chapter 23 does not cover the required science and engineering practices for standard HS-PS1-6, constructing explanations and designing solutions. Although Chapter 23 contains many opportunities for students to engage in this practice through the connections to health on the side connections pieces, the excerpts do not engage students to explore the crosscutting concept, stability and change, through guiding questions or prompt students to incorporate it into their learning. The side connections are only factual pieces of information.
	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.	**No**	There is little to no variability in the tasks that students are asked to produce. In general, the activities students are required to complete lack the foundational rigor of high school chemistry aligned to the LSS Standards. The following are examples of lessons that lack the variety necessary to help all students achieve the end of year performance expectations required under the LSS Standards: • In Unit 4, Chapter 15, Lesson 83, page 422 students are asked to explore the topic of accounting for the mass of a solution. Yet, the instructional materials do not prompt students to explain, discuss with a partner, develop a model, create a diagram, or design and conduct an experiment to determine the purity of a solution. • Unit 2 and Unit 5 has several opportunities for students to perform research and communicate their findings through posters, diagrams, and written reports. Yet, the same types of projects are found in Chapter 6, Chapter 7, Chapter 9, Chapter 18, Chapter 20, Chapter 21, and Chapter 22. Only one of these research projects allow students to explore an idea in detail, “Are black and white colors?” Even though the project is aligned with high school science and engineering practices it does not address a high school chemistry disciplinary core idea or crosscutting concept. • In Chapter 8 and Chapter 19 students plan and conduct an experiment but in Unit 3, Chapter 11, Lesson 57, page 303 students complete a lab

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			without having to plan the investigation or design solutions. The vast majority of the activities and projects do not ask students to produce solutions to problems, create arguments and explanations of theory development.
Non-Negotiable **3. DISCIPLINARY LITERACY:** Materials have students engage with authentic sources and incorporate speaking, reading, and writing to develop scientific literacy. ☐ Yes ☒ No	**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, 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.	**No**	There are few opportunities for students to use authentic resources throughout the curriculum. The following are examples of instructional materials that do not help students develop key content knowledge about the performance expectations, three-dimensional learning, and/or phenomena. • There are side notes such as biology connections in Unit 2, Chapter 6, page 152; agricultural connections in Unit 2, Chapter 7 page 195 and art connections in Unit 5, Chapter 22, page 579. The side notes or connections are not part of the three-dimensional learning process and are not directly tied to any lesson. • Although at the opening of the program there are scrolling links to current Scientific America articles; these articles are not part of the three-dimensional learning process. These articles are not tied to any lesson, nor do they help with phenomenon-based learning. They are just current events in science. • There are a few culminating activities that provide opportunities for students to review resources such as Unit 4, Chapter 15, Lesson 81, page 425 where the project assignment asks students to review an MSDS sheet. Also, primary sources such as journal excerpts and sections of scientific lab reports are sporadic. Instead, students are required to read the information from the text and answer questions, Unit 1 pages 60, 67 and Unit 3 page 298.
	REQUIRED **3b)** Students regularly engage in **speaking and writing** about scientific phenomena and engineering solutions.	**No**	Students are not asked to engage in the activity of speaking and writing about scientific phenomena and engineering solutions on a regular basis. The following are examples where the instructional materials do not strongly support speaking and writing about scientific phenomena:

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			• When questions are asked, the author answers the questions further in the text. For example, Unit 5, Chapter 18, Lesson 94 page 483 the author asks students to examine how energy is used. Yet, the instructional materials do not prompt students to engage in a debate or speaking and writing about how energy is used in the real world. Instead, the next paragraph in the text provides students with the answer to the question. • The majority of the questions are in the review section at the end of each chapter and unit. The questions are at a lower bloom's taxonomy level. For example, in Unit 5, Chapter 19, Lesson 105 students receive the following prompt, "give a scientific meaning of the word work" Students do not have to use two or more of the dimensions to respond to the prompt. • The majority of students' experiences with writing are during lesson summaries as in the example of Chapter 13, Lesson 68, page 356 where students are asked a series of questions relating to the content from the previous lesson and prompted to explain their answer or describe how they came to the conclusion.
	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.	**Yes**	Vocabulary is listed with each chapter and students develop vocabulary as they move through the lessons. The following are examples of instructional materials that support the use of vocabulary: • Unit 4, Chapter 15, Lesson 80, page 409 shows vocabulary embedded within the text of the book. The lesson discusses the terms solution, solvent, and solute and provides examples while allowing students to build a connection to the terms. On page 412 in the Lesson 80 summary, students are required to provide explanations of their understanding of the terms learned throughout the lesson. • Unit 1, Chapter 1, Lesson 3, page 9 students are introduced to the concept of matter. Matter is defined while reading the text, and at the end of the lesson several questions concerning matter are asked. For example, on page 12 in the same unit

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			students are asked to "Explain the difference between mass and volume" which allows students to demonstrate a basic understanding of ideas. • Unit 5, Chapter 18 describes how energy is observed with terms such as endothermic and exothermic. The vocabulary increases in complexity to how energy can be controlled through oxidation/reduction reactions in Chapter 21 in the same unit.
	3d) Materials address the necessity of using **scientific evidence** to support scientific ideas.	**No**	The instructional materials do not address the necessity of using scientific evidence to support scientific ideas. Opportunities for students to address scientific evidence is isolated to featured labs. • In a featured lab for Unit 5, Chapter 21 page 568 students are asked to make observations and explain what those observations prove about producing electricity from oxidation/reduction reactions. Students are not afforded the opportunity to consistently participate in labs and/or use scientific evidence to support scientific ideas. The only chapters that offer featured labs in Unit 4 are Chapters 15, 16, and 17. • Several of the featured activities do not offer opportunities to use scientific evidence to support scientific ideas. For example, Unit 1 the feature demo: A Penny for Your Thoughts, page 6 students observe a chemical transformation but they do not use the evidence to support scientific ideas. Another example is found in Unit 3, a featured weather engineering project has students design a hot air balloon using a hair dryer. They do not use evidence from their projects to explain scientific ideas. • There are few opportunities for students to use evidence to support ideas within the text and review questions. For example, in Unit 2, Chapter 8, Lesson 46, page 236 a table is present to introduce a pattern between covalent bonding and smell. Directly underneath the table the pattern is described instead of allowing the pattern to be explored with evidence from the table.

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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. ☐ Yes ☒ No	**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.	**No**	The overall organization of the instructional materials do not support student understanding of the performance expectations. The instructional materials are organized in such a manner to develop content knowledge and to prevent student misunderstanding of the disciplinary core ideas but the instructional materials do not help students develop a deep understanding of the science and engineering practices and crosscutting concepts. The following are examples from the instructional materials: • Unit 4 introduces acidic toxins. The instructional materials in this unit, Chapter 16, Lesson 86, page 437, address how the lowering in pH in fetal blood is due to low oxygen levels, but the lesson does not describe the equation occurring to decrease the pH nor does it mention the idea of fetal distress later in the lesson. • Even though the materials are organized it does not follow a logical and progressive learning sequence. For example, in Unit 1: Chapter 1 Lessons 1-5 the students begin by defining matter, mass, and volume. As the lessons progress they are asked to answer questions after each reading. The same can be found in Unit 3: Chapter 11, Lessons 56-62 where the concepts of sublimation, evaporation, atmospheric pressure, and the gas laws are introduced and practiced through questioning at the end of each lesson. In addition, there are also Chapter summaries at the end of each lesson (Unit 3: Chapter 11, Page 325) which review the main points of each section, featured labs (Unit 3: Chapter 11, Page 321) but the instructional materials do not take the science and engineering practices and crosscutting concepts into consideration. • In Unit 6, Chapter 24 students investigate the concept of equilibrium and Le Chatelier's Principle. The introduction to the chapter on page 640 asks the following questions: "When people exercise, they produce a lot of carbon dioxide, which in turn builds up carbonic acid in their bodies. A build-up of carbonic acid can alter the blood's pH,

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			which can put stress on the body. How does the body maintain a healthy equilibrium?" Later in the chapter, it does not ask for an explanation or question how carbon dioxide turns into carbonic acid. The students are not asked to construct explanations about the changes in stability dealing with blood equilibrium as called for by standard HS-PS6-1.
	4b) Materials are **coherent**, sequenced within and across units to build students' depth of knowledge.	**No**	The materials are partially coherent. The disciplinary core ideas are presented in a coherent sequence that encourages in depth knowledge of the content but the science and engineering practices and crosscutting concepts are not taught in depth. For example, Unit 1 introduces matter and patterns of the periodic table, Unit 2 discusses molecular formulas, Unit 3 and Unit 4 introduces changes to matter which leads to Unit 5 and Unit 6 exploring chemical reactions. However, the instructional materials do not explicitly use the crosscutting concepts to help students connect their understanding of concepts from unit to unit. For example, the crosscutting concept, patterns, is not explicitly connected to Unit 1 (patterns in the periodic table) and Unit 2 (patterns in molecular formulas).
	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.	**No**	The materials do not explicitly reference math standards on a continuous basis and there are few opportunities for students to measure and utilize quantitative data and mathematical and computational thinking. Also, several of the math connections that are incorporated in the materials are not aligned with the high school learning progressions. The following are examples of how mathematical and computational thinking is not fully incorporated into the instructional materials and/or how they are not aligned to the high school grade band: • Unit 1, Chapter 1, Lesson 4, pages 13-15 and pages 17-20 provide students with an explanation of how to determine the volume and density of different substances but math standards

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			are not used to help teachers connect key math skills to the content. • In Unit 3, Chapter 10, Lesson 54, pages 282-285 Charles' Law is addressed. The text begins with defining the law, then provides examples of how the law is applied, and finally students practice the law by completing given questions. All however, are not linked to current chemistry standards. • Unit 5 Chapter 22 Lesson 114 and Lesson 115 incorporate math connections. The math connections are aligned to electromagnetic waves, which is not a chemistry core idea that is addressed in high school Chemistry. Also, mathematical and computation thinking is applied throughout the lessons for Unit 6 however, none of them address Louisiana Student Standards.
SECTION II: ADDITIONAL INDICATORS OF QUALITY			
Additional Criterion **5. SCAFFOLDING AND SUPPORT:** Materials provide teachers with guidance to build their own knowledge and to give all students extensive opportunities and support to explore key concepts using multiple, varied experiences to build scientific thinking. ☐ Yes ☐ No	**REQUIRED** **5a)** There are separate **teacher support** materials including: scientific background knowledge, support in three-dimensional learning, learning progressions, 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).	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	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.).	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
Additional Criterion **6. USABILITY:** Materials are easily accessible, promote safety in the science classroom, and are viable for	**REQUIRED** **6a)** Text sets (when applicable), laboratory, and other scientific materials are **readily accessible** through vendor packaging.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6b) Materials help students build an understanding of standard operating procedures in a science laboratory	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

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implementation given the length of a school year. ☐ Yes ☐ No	and include **safety** guidelines, procedures, and equipment. Science classroom and laboratory safety guidelines are embedded in the curriculum.		
	6c) The total amount of content is **viable** for a school year.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
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. ☐ Yes ☐ No	**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.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7b) Scoring guidelines and rubrics **align** to performance expectations, and incorporate criteria that are specific, observable, and measurable.	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.

FINAL EVALUATION
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.

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	**No**	Louisiana chemistry standards are not fully addressed. Phenomena is presented as a theme instead of phenomenon for students to explore further.
	2. Three-dimensional Learning	**No**	Three-dimensional learning was not present. Crosscutting concepts were not explicitly present and science and engineering practices were often separated from the disciplinary core concepts.
	3. Disciplinary Literacy	**No**	Disciplinary core ideas are a focus in the text. There is little opportunity for students to explore ideas and to critically think to solve problems. There is little opportunity for the students to apply their knowledge to new situations

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	4. Learning Progressions	**No**	Performance expectations, science and engineering practices, and crosscutting concepts are not a focus. There are no opportunities for progression in three-dimensional learning. Math connections are not explicitly connected to Louisiana chemistry standards.
II: Additional Indicators of Quality	5. Scaffolding and Support	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	6. Usability	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
	7. Assessment	**Not Evaluated**	This section was not evaluated because the non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: **Tier III, Not representing quality**			

Appendix I.

Publisher Response

The publisher had no response.

Appendix II.

Public Comments

There were no public comments submitted.