Louisiana Believes

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Louisiana Guide to Implementing IQWST: Grade 8

To assist teachers with the implementation of the grade eight IQWST curriculum, this document provides guidance regarding how IQWST units correlate with the Louisiana Student Standards for Science (LSSS). The IQWST curriculum provides ample instructional guidance for teachers. This Louisiana Guide for Implementing IQWST goes a step further to point out places in which teachers may need to make strategic decisions considering student needs.

The IQWST Grade 8 units may include performance expectations from previous and upcoming grade levels. These units are intentionally designed to provide students the opportunity to incrementally make sense of phenomena to build understanding and abilities over time through a coherent storyline. Modification to the sequence or content of lessons within these units could undermine the design, and therefore should be approached with caution and careful consideration.

This guidance document is considered a "living" document as we believe that teachers and other educators will find ways to improve the document as they use it. Please send feedback to <u>STEM@la.gov</u> so that we may use your input when updating this guide.

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Module Design

The IQWST modules use phenomena to drive three-dimensional science instruction. The incorporated phenomena are observable events that occur in the universe and can be explained by science. They establish the purpose for learning and help students to connect their learning to real world experiences and related phenomena. IQWST engages students in the science and engineering practices as they experience, investigate, and explain phenomena while learning core ideas. Students build understanding by connecting ideas across multiple disciplines of science and across middle school grades.

The modules include bundles of performance expectations that are built around an anchor phenomenon. The modules may include performance expectations from previous or future grade levels. These modules are intentionally designed to provide students the opportunity to incrementally make sense of phenomena to build understanding and abilities over time through a coherent storyline. Modification to the sequence or content of lessons within these units could undermine the design, and therefore is not recommended and should be approached with much caution and careful consideration.

Primary and Secondary Standards

The modules do not equally emphasize the <u>primary and secondary standards</u>. There is a greater emphasis on the primary standards to support students as they develop an understanding of the anchor phenomenon, the science and engineering practices, disciplinary core ideas, and crosscutting concepts. The modules introduce or revisit secondary standards throughout the modules to deepen students' understanding of the three dimensions, support students' learning over multiple grade levels, and help students' make interdisciplinary connections.





Standards by Module

	Module 1	Module 2	Module 3	Module 4
	Chemistry IC2	Physical Science PS2	Earth Science ES3	Life Science LS3
Number of	14 lessons	11 lessons	10 lessons	11 lessons
Lessons	2 Appendices	1 Appendix	3 Appendices	3 Appendices
Anchor Phenomenon Question	How can I make new stuff from old stuff?	Why do some things stop while others keep going?	How is the Earth changing?	Why do organisms look the way they do?
Louisiana Students Standards for Science	8-MS-PS1-1 8-MS-PS1-3 8-MS-PS1-6* 7-MS-PS1-2 7-MS-PS1-4 7-MS-PS1-5	8-MS-PS1-6* 8-MS-PS3-3† 8-MS-PS3-5 6-MS-PS3-1 6-MS-PS3-2 6-MS-PS2-3 6-MS-PS2-4 6-MS-PS4-1 6-MS-PS4-1 6-MS-PS4-2 7-MS-PS1-2 7-MS-PS1-4 7-MS-PS3-4	8-MS-ESS1-4 8-MS-ESS2-1 8-MS-ESS2-2 8-MS-ESS3-2 8-MS-LS4-1*† 6-MS-ESS3-4 7-MS-PS1-4 7-MS-PS1-5	8-MS-LS1-4*† 8-MS-LS1-5 8-MS-LS3-1 8-MS-LS4-2† 8-MS-LS4-3† 8-MS-LS4-6 8-MS-ESS3-3† 6-MS-LS1-2 6-MS-LS2-1 7-MS-LS2-4 7-MS-LS2-4 7-MS-LS4-4 7-MS-LS4-5

[†]The identified phenomenon only partially addresses the performance expectation. 8-MS-ESS3-1 is not fully addressed by the materials. Further instruction of these performance expectations should be explored by incorporating the Grade 8 <u>Louisiana Scope and Sequence</u> units as needed. *Performance expectation appears in more than one module.







LDOE Formative Assessment Resources

Created by Louisiana educators to support formative assessment in the classroom, the Department has released a library of discrete items and item sets correlated to the Louisiana Student Standards for Science. These items, along with LEAP 2025 Practice Test Items, may be used in conjunction with guidance from high-quality curriculum as opportunities for students to demonstrate what they have learned. LDOE Formative Assessment Resources can be found on the <u>K-12 Science Planning</u> webpage.

Module	Discrete Items	Item Sets and Practice Test Items	
How can I make new stuff from old stuff? (Grade 8, IC2)	Marbles (8-MS-PS1-1) Mixing Liquids (8-MS-PS1-3)	Nitinol (8-MS-PS1-1, 8-MS-PS1-3)	
Why do some things stop while others keep going? (Grade 8, PS2)	Potato Experiment (8-MS-PS3-3) Sailboat (8-MS-PS3-5)	Solar Cooker (8-MS-PS3-3, 8-MS-PS3-5)	
How is the Earth changing? (Grade 8, ES3)	Fossils (8-MS-ESS1-4) South America (8-MS-ESS2-1) Mushroom Rock (8-MS-ESS2-2) Pangaea (8-MS-ESS2-3) Petroleum (8-MS-ESS3-1) Cascadia (8-MS-ESS3-2) Pollutants (8-MS-ESS3-3) Geo_Time_Scale (8-MS-LS4-1)	North Carolina Landslides (8-MS-ESS2-2, 8-MS-ESS3-2) Tsunamis & the Louisiana Coast (8-MS-ESS2-1, 8-MS-ESS3-2) Opal (8-MS-ESS3-1, 8-MS-ESS3-3) Tornadoes (8-MS-ESS3-2)	
Why do organisms look the way they do? (Grade 8, LS3)	Scotch Broom (8-MS-LS1-4) Daisies (8-LS1-5) Miles Davis (8-LS3-1) Horses (8-MS-LS4-2) Embryo Development (8-MS-LS4-2) Bats (8-MS-LS4-2) Comparing Embryos (8-MS-LS4-3) Hummingbird (8-MS-LS4-6)	Surviving in Desert Landscapes (8-LS1-5, 8-LS1-4) Glowing Jellyfish (8-LS3-1, 8-MS-LS4-6)	





IQWST Remote Learning Resources

The <u>Remote Learning Lesson Plan Overview</u> contains information about Remote Learning Lesson Plans (RLLPs) including:

- link to Louisiana Specific Website
- remote adaptation design considerations
- preparation protocols for teachers
- suggestions for supporting students
- links to additional IQWST resources and support

For questions about this or other IQWST resources, contact support@activatelearning.com.

