Louisiana Believes

Louisiana Guide to Implementing IQWST: Grade 7

To assist teachers with the implementation of the grade seven 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 7 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 STEM@la.gov so that we may use your input when updating this guide.

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DEPARTMENT of EDUCATION
Louisiana Believes

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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 primary and secondary standards. 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 Chemistry IC1	Module 2 Earth Science ES2	Module 3 Life Science LS2	Module 4 Chemistry IC3
Number of Lessons	16 lessons	8 lessons 1 Appendix	11 lessons	10 lessons
Anchor Phenomenon Question	How can I smell things from a distance?	What makes the weather change?	What is going on inside of me?	How does food provide my body with energy?
Louisiana Students Standards for Science[2]	7-MS-PS1-2* 7-MS-PS1-4* 7-MS-PS3-4* 7-MS-ESS2-4* 8-MS-PS1-1 8-MS-PS3-3	7-MS-ESS2-4* 7-MS-ESS2-5 7-MS-ESS2-6 7-MS-ESS3-5 7-MS-PS1-4* 6-MS-ESS1-1 8-MS-ESS2-1 8-MS-PS3-5	7-MS-LS1-3 7-MS-LS1-7* 7-MS-PS1-5* 6-MS-LS1-1 6-MS-LS1-2 6-MS-LS2-2 6-MS-LS2-3 6-MS-ESS1-3 8-MS-LS1-4	7-MS-PS1-2* 7-MS-PS1-5* 7-MS-PS3-4* 7-MS-LS1-6 7-MS-LS1-7* 7-MS-LS2-4† 6-MS-PS1-1 6-MS-LS2-3 8-MS-PS1-6 8-MS-LS1-5

†The identified phenomenon only partially addresses the performance expectation. 7-LS2-5, 7-LS3-2, 7-LS4-4, & 7-LS4-5 are not fully addressed by the materials. Further instruction of these performance expectations should be explored by incorporating the Grade 7 Louisiana Scope and Sequence units as needed.

*Performance expectation appears in more than one module.

[2]Performance expectations which are unique to the Next Generation Science Standards for Middle School have not been included in this table.

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 K-12 Science Planning webpage.

Module	Discrete Items	Item Sets and Practice Test Items
How can I smell things from a distance? (Grade 7, IC1)	Two Solids (7-MS-PS1-2) Hydrogen Iodide (7-MS-PS1-2) Brass Experiment (7-MS-PS1-4) Jeff's Models (7-MS-PS1-4) Temperature Increase (7-MS-PS3-4)	Melting Icebergs (7-MS-PS1-4, 7-MS-PS3-4)
What makes the weather change? (Grade 7, ES2)	Water Cycle (7-MS-ESS2-4) Washington Rainfall (7-MS-ESS2-5) White Chuck Glacier (7-MS-ESS3-5)	Arizona Monsoon (7-MS-ESS2-5, 7-MS-ESS2-6)
What is going on inside of me? (Grade 7, LS2)	Artificial Windpipe (7-MS-LS1-3) Dandelions (7-MS-LS1-7) Pesticides (7-MS-PS1-5)	Dead Zone (7-MS-LS1-7, 7-MS-LS2-5) Volcanic Carbon (7-MS-ESS3-5, 7-MS-PS1-5) Louisiana Swamplands (7-MS-LS1-7, 7-MS-LS1-6)
How does food provide my body with energy? (Grade 7, IC3)	Coming Soon	Zebra Mussels (7-MS-LS2-4, 7-MS-LS2-5)
Additional Standards	Whiptails (7-MS-LS3-2) Cystic Fibrosis (7-MS-LS3-2) Siblings (7-MS-LS3-2) Amoebas (7-MS-LS3-2) Anoles (7-MS-LS4-4) Feral Chickens (7-MS-LS4-4) Arctic Apples (7-MS-LS4-5) Shar Pei (7-MS-LS4-5)	Coral (7-MS-LS2-4, 7-MS-LS4-4) Spider Plants (7-MS-LS3-2, 7-MS-LS4-4)

IQWST Remote Learning Resources

The Remote Learning Lesson Plan Overview 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.