

Louisiana Believes

Louisiana Guide to Piloting OpenSciEd: Grade 8

This document provides guidance to assist eighth-grade teachers with the field-testing of OpenSciEd units. 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.

Updated August 17, 2022



Table of Contents

Overview of OpenSciEd	3
Sample Scope and Sequence (two versions)	4
Alignment with EAGLE Sample Assessment Items	6

Overview of OpenSciEd

OpenSciEd is an effort among science educators, curriculum developers, teachers and philanthropic foundations to improve the supply of and demand for high-quality K-12 science instructional materials by producing open-sourced, freely available instructional materials designed for college and career-ready science standards. OpenSciEd works with classroom educators, experienced science curriculum developers, individual school districts, education non-profits, and the science education community to create and pilot robust, research-based, open-source science instructional materials.

Field Testing and Release of Units

Ten partner states volunteered to join this effort including: California, Iowa, Louisiana, Massachusetts, Michigan, New Mexico, New Jersey, Oklahoma, Rhode Island and Washington. After the initial development of the OpenSciEd units, the unit prototypes or **field test units** undergo rigorous external review and robust field-testing in participating classrooms across partner states. Seven Louisiana districts are involved in field-testing the units. The field test units are revised based on the feedback and data collected. The revised or **complete** units are submitted to NextGenScience Peer Review Panel and made freely and openly available to the public upon earning a quality rating. The OpenSciEd release schedule provides for **complete units** to release three at a time beginning August 2019 with the entire middle school program (18 units total) fully completed and released in early 2022.

Unit Design & Sample Scope and Sequence

The units in the OpenSciEd Sample Scope and Sequence include bundles of performance expectations that are built around an anchor phenomenon. The scope and sequence integrates the OpenSciEd curriculum and the [Grade 8 Louisiana Sample Scope and Sequence](#). The scope and sequence does not illustrate the only appropriate sequence to teach the units. The units can be organized into different learning sequences, and the performance expectations can be bundled around different phenomena.

The OpenSciEd units may include performance expectations from previous or future 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 is not recommended and should be approached with caution and careful consideration.

Contact

For questions or requests for additional information on the OpenSciEd initiative and/or materials, contact info@openscienced.org.

2022-23 Sample Scope and Sequence

	Unit 2 Plate Tectonics and Rock Cycling OpenSciEd Unit 6.4	Unit 3 Natural Hazards OpenSciEd 6.5	Unit 4 Energy in Chemical Reactions OpenSciEd 7.2	Unit 5 Earth's Resources & Human Impact OpenSciEd 7.6	Unit 6 Genetics OpenSciEd Unit 8.5	Unit 7 Natural Selection & Common Ancestry OpenSciEd 8.6
Unit Question	How and why does Earth's surface change?	Where do natural hazards happen and how do we prepare for them?	How can we help people make a flameless heater?	How do changes in earth's system impact our communities and what can we do about it?	Why are living things different from one another?	How could things living today be connected to things living long ago?
Standards	8-ESS1-4 8-ESS2-1 8-ESS2-2 8-ESS2-3 8-LS4-1*	8-ESS3-2	8-PS1-6	8-ESS3-1 8-ESS3-3* 6-ESS3-4 7-ESS3-5	8-LS1-5* 8-LS3-1 7-LS3-2 7-LS4-5	8-LS1-4 8-LS4-1* 8-LS4-2 8-LS4-3 8-LS4-6 7-LS4-4
Unit Materials	Complete Unit	Complete Unit	Complete Unit	Complete Unit	Complete Unit	Complete Unit
Additional Resources	Distance Learning (field test version)	Distance Learning (field test version)	Distance Learning	Distance Learning (field test version)	Distance Learning (field test version)	Distance Learning (field test version)

8-PS1-1, 8-PS1-3, 8-PS3-3, and 8-PS3-5 are not addressed by the Grade 8 OpenSciEd units. The performance expectations can be addressed by incorporating the [Grade 8 Louisiana Sample Scope and Sequence](#) units as needed. *The performance expectation is partially addressed using the identified phenomenon and is addressed in multiple units.

Alignment to Eagle Assessment Items

EAGLE is a bank of assessment items created by Louisiana educators to support formative assessment in the classroom and appear on the [K-12 Science Planning Page](#). These items may be used in conjunction with guidance from the high-quality curriculum as opportunities for students to demonstrate what they have learned.

Grade 8	EAGLE Discrete Items	EAGLE and Practice Test Item Sets
Plate Tectonics and Rock Cycling Unit 6.4	Fossils (8-MS-ESS1-4) South America (8-MS-ESS2-1) Mushroom Rock (8-MS-ESS2-2) Pangaea (8-MS-ESS2-3) Geo_Time_Scale (8-MS-LS4-1)	North Carolina Landslides (8-MS-ESS2-2, 8-MS-ESS3-2)
Natural Hazards Unit 6.5	Cascadia (8-MS-ESS3-2)	Tsunamis & the Louisiana Coast (8-MS-ESS2-1, 8-MS-ESS3-2) Tornadoes (8-MS-ESS3-2)
Energy in Chemical Reactions Unit 7.2	Items Coming Soon	Items Coming Soon
Natural Resource and Human Impact Unit 7.6	Petroleum (8-MS-ESS3-1)	Opal (8-MS-ESS3-1, 8-MS-ESS3-3)
Genetics Unit 7.6	Daisies (8-MS-LS1-5) Miles Davis (8-MS-LS3-1)	Glowing Jellyfish (8-LS3-1, 8-MS-LS4-6)
Natural Selection and Common Ancestry Unit 8.6	Scotch Broom (8-MS-LS1-4) 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)
Additional Items	Marbles (8-MS-PS1-1) Mixing Liquids (8-MS-PS1-3) Potato Experiment (8-MS-PS3-3) Sailboat (8-MS-PS3-5)	Nitinol (8-MS-PS1-1, 8-MS-PS1-3) Solar Cooker (8-PS3-3, 8-PS3-5)