



Louisiana Believes

Louisiana Guide to Implementing Activate Learning OpenSciEd: Grade 8

To assist teachers with the implementation of the Activate Learning OpenSciEd curriculum for grade 8, this document provides guidance regarding how Activate Learning OpenSciEd units correlate with the [Louisiana Student Standards for Science](#) (LSSS). The Activate Learning OpenSciEd curriculum provides ample instructional guidance for teachers. This Louisiana Guide for Implementing Activate Learning OpenSciEd goes a step further to point out places in which teachers may need to make strategic decisions considering student needs.

The Activate Learning OpenSciEd Grade 8 units may include performance expectations from previous 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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Standards by Unit¹

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
	Plate Tectonics & Rock Cycling	Natural Hazards	Energy in Chemical Reactions	Earth's Resources & Human Impact	Genetics	Natural Selection & Common Ancestry
Number of Lessons	14	10	10	18	17	15
Anchor Phenomenon 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?
Louisiana Students Standards for Science	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

*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 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](#) web page.

Grade 8	Discrete Items	Item Sets and Practice Test Item Sets
Plate Tectonics & 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
Earth's Resource & 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 & 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)