

Teaching and Learning

Louisiana Guide to Piloting inquiryHub Biology

The OpenSciEd Biology materials build on the feedback from several years of the Louisiana pilot of the inquiryHub curriculum as well as crucial feedback provided by Louisiana teachers during the official field test of the next generation of these materials. While the foundational inquiryHub curriculum will remain available through 2027, professional learning will no longer be available. With this, the high-quality pilot status of inquiryHub Biology will end after the 2024-2025 school year.

The LDOE recommends that systems begin the transition to OpenSciEd Biology units for the 2024-2025 school year if they have not already done so. See Scope and Sequence guidance for the transition year on the next page.

For questions or requests for additional information on this transition or the Louisiana OpenSciEd high school pilot, contact <u>STEM@la.gov</u>.

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Overview of inquiryHub

Unit Design

The inquiryHub units were 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 much caution and careful consideration.

Unit Format: Deeply Digital

The inquiryHub (iHub) materials were developed from the ground up as a digital unit for both teachers and students.

Since the initial iHub Biology curriculum was developed, the materials have been revised based on the feedback and active participation of classroom teachers and based on science and education research that informs best practices. The product of these revisions were then used as a foundation for the OpenSciEd Biology curriculum. All future iterations of the materials will be made to the OpenSciEd Biology curriculum and not to the iHub Biology materials.

2024-2025 Sample Scope and Sequence

	OpenSciEd B.1 Ecosystem Interactions & Dynamics	inquiryHub Biology Ecosystems Bend 2: Trees	OpenSciEd B.3 Inheritance & Variation of Traits	OpenSciEd B.4 Natural Selection & Evolution of Populations	inquiryHub Biology Evolution Bend 2: Juncos
Number of Lessons *lessons vary in length from 1-5 class periods	11 lessons	14 lessons	15 lessons	11 lessons	16 lessons
Anchor Phenomenon Question	How do ecosystems work, and how can understanding them help us protect them?	How Do Small Changes Make Big Impacts on Ecosystems?	Who gets cancer and why? Where should we focus efforts on treatment and prevention?	How is urbanization a driving force of evolution? Should we design urban spaces more hospitably for non-human species?	How do populations change over time?
Louisiana Students Standards for Science ²	HS-LS2-1 HS-LS2-4* HS-LS2-6 HS-LS2-7 HS-ESS3-3	HS-LS1-2 HS-LS1-3 HS-LS1-4* HS-LS1-5 HS-LS1-6 HS-LS1-7 HS-LS2-4* HS-LS2-6* HS-LS2-7*	HS-LS1-1 HS-LS1-4* HS-LS3-1 HS-LS3-2 HS-LS3-3	HS-LS4-2* HS-LS4-3 HS-LS4-4* HS-LS4-5	HS-LS4-1 HS-LS4-2* HS-LS4-3* HS-LS4-4* HS-LS4-5* HS-LS3-1*
Unit Resources	<u>Complete, revised</u> <u>unit</u>	<u>inquiryHub unit</u>	<u>Complete, revised</u> <u>unit</u>	<u>Complete, revised</u> <u>unit</u>	<u>inquiryHub unit</u>

HS-LS1-8 is not addressed *The performance expectation is addressed across multiple units. +The performance expectation is addressed across the three-course sequence (Biology, Chemistry, Physics).²Performance expectations which are unique to the Next Generation Science Standards for Life Science have not been included in this table.

LDOE Formative Assessment Resources

Created by Louisiana educators to support formative assessment in the classroom, the LDOE 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 Resources web page.

Unit	Discrete Items	Item Sets and Practice Test Items
OpenSciEd B.1 Ecosystem Interactions & Dynamics	Mary's Goldfish, Nutria (HS-LS2-1) Seawater Acidity (HS-LS2-6) Salvinia (HS-LS2-7)	Carbon Dioxide (HS-LS2-6) Wolves (HS-LS2-1, HS-LS2-6) Kit Fox Ecology (HS-LS2-1, HS-LS2-7)
inquiryHub Biology Ecosystems Bend 2: Trees	Elodea Lab (HS-LS1-5) Carb Loading (HS-LS1-7) Bald Eagle (HS-LS2-4)	Alaskan Salmon (HS-LS1-6, HS-LS1-4) TonewoodTrees (HS-LS1-7, HS-LS2-4)
OpenSciEd B.3 Inheritance & Variation of Traits	Sickle Cell Trait, Zygote (HS-LS1-1) Dolly (HS-LS1-4) Tay Sachs (HS-LS3-1) Sandra Laing (HS-LS3-2) Cystic Fibrosis (HS-LS3-3)	Primate Traits (HS-LS3-1, HS-LS3-2) Genes (HS-LS1-4, HS-LS3-1) Stem and IPS Cells
OpenSciEd B.4 Natural Selection & Evolution of Populations	Irish Lumper, Daphne Major Finches (HS-LS4-2) Blue Gramma, Super Weeds, Elephants (HS-LS4-3) Oil Spill (HS-LS4-4)	Toad (HS-LS4-5) Adaptations I (HS-LS4-4, HS-LS4-5) Adaptations II (HS-LS4-4, HS-LS4-5)
inquiryHub Biology Evolution Bend 2: Juncos	Arkansas Whale, Cytochrome C (HS-LS4-1) Irish Lumper, Daphne Major Finches (HS-LS4-2) Blue Gramma, Super Weeds, Elephants (HS-LS4-3) Oil Spill (HS-LS4-4)	Adaptations I (HS-LS4-4, HS-LS4-5) Adaptations II (HS-LS4-4, HS-LS4-5) Banded Snails (HS-4-5, HS-LS4-4) Scales and Feathers (HS-LS4-1, HS-LS1-1)