

Transition to New Science Assessments

The format and content of the 2017-2018 End-of-Course (EOC) Biology assessment will be similar to the 2016-2017 assessment. The Spring 2018 EOC Biology test will contain embedded field-test items that will be used to create the new LEAP 2025 Biology five-level assessment, which will become operational beginning with the Fall 2018 test administration. Students in grades 3 through 8 will take a science field test during the regular testing window but will not take an operational science test for the Spring 2018 administration. The items from these field tests will be used to create the new LEAP 2025 science assessments for grades 3 through 8, to be operational with the Spring 2019 administration. For more information about the field tests by grade/course, access the LEAP 2025 Field Test Guides, available in Fall 2017.

Key Goals for the NEW LEAP 2025 Science Assessments

Starting in the 2018-2019 school year, all students in grades 3 through 8 and Biology will take the LEAP 2025 science assessments, which provide

- questions that have been reviewed by Louisiana educators to ensure their alignment to the Louisiana Student Standards for Science and appropriateness for Louisiana students;
- measurement of the full range of student performance, including that of high- and low-performing students; and
- information for educators and parents about student readiness in science and whether students are “on track” for college and careers.

New Assessments Support Key Shifts in Science Instruction

The design of the new LEAP 2025 science tests is rooted in the academic philosophy written into the new [Louisiana Student Standards for Science](#).

Apply content knowledge

In the classroom, students develop content knowledge of the Disciplinary Core Ideas (DCIs), the key ideas that have broad importance within or across multiple science and engineering disciplines. However, simply having content knowledge is not enough. Students must apply content knowledge to scientific phenomena. Phenomena are real world observations that can be explained through scientific knowledge and reasoning (e.g., water droplets form on the outside of a water glass, plants tend to grow toward their light source, different layers of rock can be seen on the side of the road).

On the test, students answer questions aligned to Performance Expectations (PE) bundles (groupings of like PEs) and the corresponding DCIs. The students begin each set of questions by reading through stimulus materials connected to a scientific phenomenon.

Investigate, evaluate, and reason scientifically

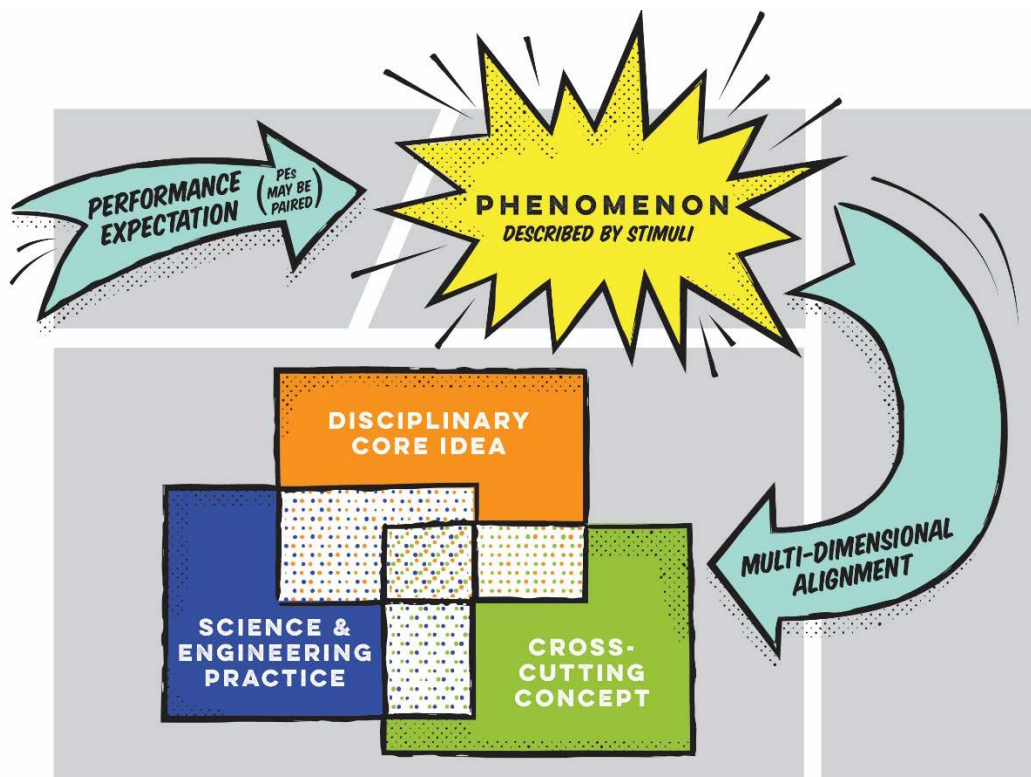
In the classroom, students do more than learn about science; they “do” science. Science instruction must integrate the practices, or behaviors, of scientists and engineers as students investigate real-world phenomena and design solutions to problems.

On the test, students do more than answer recall questions about science; they apply the practices of scientists and engineers as they investigate each real-world phenomenon and design solutions to given problems.

Connect ideas across disciplines

In the classroom, students develop a coherent, science-based view of the world and make connections across the domains of science (life science, physical science, earth and space science, environmental science, engineering, and technology). These connections are identified as crosscutting concepts (CCCs), which have applications across all domains.

On the test, sets of questions assess the application of knowledge across the domains of science for a comprehensive picture of student readiness for their next grade or course in science.



ITEMS, ITEM SETS, AND TASK SETS ARE ALIGNED TO AT LEAST TWO OF THE THREE DIMENSIONS.

Science and Biology Field Test Item Types

The field tests include the following stimulus-based item types:

- selected-response (multiple choice and multiple select)
- technology-enhanced (dropdown menus, drag and drop, hotspots, etc.)
- fill-in-the-blank
- two-part items made of a combination of item types
 - two-part *dependent*, where the score in part B is dependent on the response in part A
 - two-part *independent*, where the responses in each part are related in content but not in scoring
- constructed-response
- extended-response

Future Releases: Field Test Guides and Online Tools Training

For more specific information about the field tests, look for the Field Test Guides for science grades 3-8 and Biology, which will be available in Fall 2017. The Field Test Guides will include information on design, session times, sample items, and multi-dimensional alignment. Additionally, students will have the opportunity to experience the computer-based testing environment and a variety of science item types in the Online Tools Training (OTT) in Winter 2017-2018.

Resources

- [K-12 Louisiana Student Standards for Science \(2017\)](#) provides the performance expectations and three-dimensional learning for all grades
- [Science Standards: Shifts In Science](#) supports teachers in understanding how three-dimensional learning impacts instruction
 - [Appendix A: Learning Progressions](#) describes the development of science and engineering practices (SEPs), disciplinary core ideas (DCIs), and crosscutting concepts (CCCs) as appropriate for grade spans across K-2, 3-5, middle school, and high school
 - [Appendix B: Connections to ELA and Math K-12](#) details the connection between the Louisiana Student Standards for Science and the Louisiana Student Standards for Math and ELA
- Online Tools Training (OTT) (*Winter 2017-2018*) provides students and teachers opportunities to become familiar with the tools available in INSIGHT or [here](#) using a Chrome browser
- [LEAP Accessibility and Accommodations Manual](#) provides information about Louisiana's accessibility features and accommodations for testing
- [LEAP 2025 Technology-Enhanced Item Types](#) provides a summary of technology-enhanced items students may encounter in any of the computer-based tests across courses and grade levels
- [2017-2018 Louisiana Assessment Calendar](#) includes information on testing windows