LOUISIANA DEPARTMENT OF EDUCATION

Office of Assessments, Accountability, and Analytics

LEAP 2025 Science Practice Test Guidance

Purpose

The LEAP 2025 practice test is intended to be used as an instructional tool and **not** to predict performance on the summative test. That is because the items on the practice test have not gone through the same review process as the LEAP 2025 operational test items, such as field-testing and data review. This document includes the following information to support using the practice test as an instructional tool:

Contents

How to Use and Not Use

The recommendations and cautions that follow are meant to help prepare students for the LEAP 2025 administration, help teachers better understand the science shifts, and help administrators better understand what should and should not be done with the practice test.

General Use	Specific Guidance	How to Use	How to Not Use

Examine practice test CONTENT to evaluate instruction and assessments.	Think about how to help prepare students for the sets presented on the practice tests by examining your instructional materials and strategies.	• Notice how the practice test aligns to the shifts in science:
		  o Test items and sets are anchored on phenomena.
		  o Questions ask students to go beyond recalling basic facts and make connections among the content of the Louisiana Student Standards for Science (LSSS).
		  o The extended-response task asks students to express their knowledge and understanding of science.
		• Notice the set-based design and compare the approach to existing lessons/units.
		• Use the alignment information from the answer key to understand how each item aligns to at least two dimensions.
		• Helps answer questions like: "What does multi-dimensional assessment look like?" and "How does my interpretation of the LSSS compare to the items shown on the practice test?"
			• **Avoid** prioritization of content based on the LSSS included on the practice test because it does not necessarily represent all of the content eligible for the operational test.
			• **Avoid** limiting instructional strategies to only those required for the practice test (e.g., limiting instructional sets to only those presented in the practice test, using only the bundled PEs used in the practice test, etc.).
			• **Do not** use the practice test to gather cumulative data about overall student performance and preparedness. Items on the practice test have not gone through the same review process as the LEAP 2025 operational test items, such as field-testing and data review.

	Use as a basis of comparison for purchased and open-source assessments.	• Use the practice test as a guide when selecting assessments in terms of rigor-level, content, item types and variety, cognitive complexity, and scoring. • Examine assessment materials and ask questions such as: "Does the assessment offer the item variety and set-based approach that is reflected in the practice test?" and "How can I revise a pre-made assessment to assess students according to the shifts?" • Use in conjunction with Instructional Materials Evaluation Tools provided by the LDOE.	• **Do not** use only stimulus materials provided in the practice test for classroom instruction. • **Avoid** designing lessons based solely around the item sets within the practice test.

General Use	Specific Guidance	How to Use	How to Not Use
	Examine and use rubrics/scoring note to better understand the expectations for constructed- and extended-response items.	• Use the rubrics/scoring notes in the practice test answer keys to better understand the expectations for student expression of scientific knowledge and understanding. • Use the Scoring Activity with fellow teachers and with students to establish common expectations for written responses in science.	• **Avoid** focusing on superficial concerns when scoring (e.g., number of paragraphs rather than development of ideas; quantity versus quality of evidence; formatting over content). • **Avoid** focusing only on the qualities of the responses with the highest scores; instead, find positive qualities at every score point to help students identify their individual strengths and weaknesses.
Simulate TESTING CONDITIONS to help students feel prepared for actual test administration.	Facilitate testing discussions between teachers and students.	• Discuss the timing and pacing, item types, and elements of complete responses with students. • Encourage students to answer all questions and complete all parts of the extended-response.	• **Do not** overwhelm students by being overly focused on testing time. Instead, focus student development of content knowledge through a variety of phenomena throughout the course.
	Have students practice timing and pacing.	• Set time limits on **some** science tests and tasks. • Practice timed writing by administering the task set from the practice test, simulating testing conditions to help students become more mindful and at ease with timed setting.	• **Avoid** timing all assessments. • **Avoid** administering all sessions within a single day: Choose to administer only part of the practice test or administer the sets and standalones over the course of the school year. • **Avoid** altering classroom and school schedules to administer the practice test.
	Have students practice with the test mode format — paper-based (PBT) or computer-based (CBT).	CBT (grades 3 through 8 and Biology) • Provide students with opportunities to practice typing responses to constructed- and extended-response items.	• **Avoid** spending too much instructional time on test-prep; instead, focus on building the knowledge and skills students need by having them do the work of scientists and/or engineers.

General Use	Specific Guidance	How to Use	How to Not Use
		• Provide students with ample time to practice using the Online Tools Training (OTT) to allow them to gain familiarity with all features of the CBT. It is strongly encouraged that students be given multiple opportunities to interact with CBT tools and features. • Discuss with students the best way to use the tools based on the demands of different item types (e.g., using the highlighting tool to mark evidence for response to the ER). • Have students pay extra attention to the online tools that are available to them. For example, when skipping items to come back to, students should be sure to use the "flag" button so that they may see all skipped items when accessing the "Review" page. PBT (grade 3 only) • Have students mark stimuli and test questions (annotate stimuli, highlight evidence, mark key words in directions and questions, etc.). • Create assessments for students to practice bubbling answers on the test itself rather than recording them on a separate answer sheet. • Have students place an X to the right of the text in an answer option to show that they have eliminated that option. Students need to be sure that the bubbles are free from stray marks that may be made when crossing out or highlighting. • Encourage students to make a list (on scratch paper) of question numbers when skipping items to return to. • Have students practice writing responses only in the space provided and erasing or crossing out work that they do not want scored.	• **Avoid** overwhelming students with test-taking strategies, especially in the days prior to the assessment; instead, incorporate the analysis of classroom assessments into daily instruction (e.g., have students discuss the wrong answers they chose on a classroom assessment to discover their level of understanding).

General Use	Specific Guidance	How to Use	How to Not Use
Examine practice test FORMAT to design instructional tasks and classroom assessments that use similar features.	Sequence questions in meaningful ways.	• Build lessons, instructional tasks, and classroom assessments that sequence questions in a purposeful way to help build understanding and lead to a culminating question.	• **Avoid** making every classroom question like items on the practice test.
	Incorporate set-based assessments.	• Create some instructional tasks and classroom assessments that reflect the set-based design. • Incorporate questions from multiple science domains (life science, physical science, Earth science), so students have opportunities to make connections. Include a variety of item types on classroom assessments, including multiple choice, multiple select, constructed response, and extended response.	• **Avoid** making all classroom assessments mirror the style and format of the practice test. Instead, use hands-on and formative assessments to gain meaningful information on student progress in preparation for set-based assessments.
	Incorporate practice test items into instruction.	• Use practice test sets and questions aligned to previously taught content for review during a lesson. Incorporate sets and questions aligned to current and future content to check for understanding during an upcoming lesson. • Expand discussions about test questions beyond content and correct answers to include skills and strategies for making connections. • Incorporate test materials into lessons (scratch paper, highlighters).	• **Avoid** using item sets as the sole measure of necessary content for each topic. • **Avoid** designing instructional tasks and set-based assessments focused on only one Performance Expectation (PE). Instead, design tasks and item sets with bundled PEs.

Interpreting and Using Results

The LEAP 2025 practice tests are intended to be used as an instructional tool and **not** to predict student performance on the summative tests. The practice tests should **not** be used to place students in achievement levels. Assessing student performance in this way would yield inaccurate results. The practice tests are designed to provide students and teachers a look at the different item types on the summative assessment and are **not** inclusive of all content covered by the Louisiana Student Standards for Science.

When analyzing student performance on the practice test, do not make assumptions about a student's score (i.e., 70% equals a D). To interpret the results of the practice test in this way would be inaccurate. Unlike classroom tests, statewide assessments (i.e. LEAP 2025) are not scored on a grading scale. For example, answering 95% of questions correctly is always an A, nor answering only 40% of questions correctly is always an F. Instead of focusing on individual student performance, consider general patterns, such as those presented in the table that follows, and how to best address those issues in classroom instruction.

Observable Patterns	Recommendations
Student responses indicate gaps in content knowledge or skills.	• Incorporate material related to the content and skills into current lessons, as remediation or extensions of assignments or as part of class discussions, to allow students to make connections and better understand how earlier events led to and influenced later events.
Students struggle with items that require analysis of stimulus materials.	• Provide students with opportunities to engage with a variety of stimuli including graphs and charts, guiding students as they practice key skills.
Students select only one correct answer for multiple-select items.	• Have students practice with multiple-select items, encouraging them to circle/highlight the number of correct answers shown in the question stem. • Engage in discussions with students about multiple-select items. Carefully consider each answer option, ask students to explain each correct answer and why the other options are incorrect.
Students struggle to analyze and/or evaluate claims using evidence from stimulus materials and/or prior content knowledge.	• Engage students in discussions that prompt them to make connections in their scientific understanding supported by evidence and factual information. • Provide students with feedback that is meaningful, actionable, and timely. • Have students score their responses using the rubric/scoring notes. Encourage them to compare their scoring to teacher scoring and compare their responses to exemplary responses.
Students are unable to complete sessions within the time allowed.	• Have students practice skills related to writing on demand, flagging items for review, pacing, and managing time.

Observable Patterns	Recommendations
Students skip difficult questions with intentions to return, but experience difficulty finding all skipped questions on review.	• Have students who will take paper-based tests use scratch paper to make a list of skipped questions on classroom assessments. Have students brainstorm other strategies. • Have students who will take computer-based tests practice using the "flag" tool. Encourage students to deliberately select the "flag" button for specific questions. Once they have flagged specific questions, have students select "Review/Exit" to see which questions have been answered, which are unanswered, and which have been flagged. Students should practice returning to flagged and unanswered questions to provide answers, and to answered questions to check their work.

General Practice Test Structure

Specific information about the test structure by grade level/course are included in the LEAP 2025 Assessment Guides in the LDOE Assessment Guidance Library.

	Science Grades 3-8 and Biology				
Test Session	Components	Practice Test Suggested Time (minutes)			
		Grade 3	Grades 4-5	Grades 6-8	Biology
Session 1	Item Sets and Standalones	50	60	65	75
Session 2	Task Set and Standalones	20	25	30	45
Session 3	Item Sets and Standalones	50	60	65	75

All LEAP 2025 tests are timed and **no additional time** is permitted, except for students who have a documented extended time accommodation (e.g., an IEP).

Differences Between Practice Tests and Operational Tests

The design of the LEAP 2025 Grades 3 and 4 Science Practice Tests differs from the design of the operational tests since the practice tests include a task with an extended-response item. Because students in grades 3 and 4 should learn how to express scientific understanding and reasoning with written explanation, it is essential that teachers continue to incorporate extended-response tasks into classroom instruction and formative classroom assessments. The continued use of extended-response tasks in the classroom will deepen students' understanding of the content and help students transfer that understanding to different phenomena and ensure student readiness for the next grade. The LEAP 2025 Grades 3-8 Science Practice Tests differ from the design of the operational tests since the new operational tests have been reduced from three sessions to two sessions. Because of this design change, the number of item sets and standalone items also differs.

Item Types

Type	Specifics	Point Value
Multiple Choice (MC)	Grades 3-8, Biology • Appear in sets and as standalone items • 4 answer options and **only 1** correct answer	1 point
Multiple Select (MS)	Grades 3-5 • Appear in sets and as standalone items • More than 4 answer options and **2 or more** correct answers • **Always** identify the number of correct answers to be selected Grades 6-8, Biology • Appear in sets and as standalone items • More than 4 answer options and **2 or more** correct answers • Directions identify the number of correct answers to be selected **unless** it appears in **Part B of a two-part dependent item (TPD)**. In that case **only**, the question will then be worded to "select **all** answers that apply."	1 point
Two-part Item (TPD or TPI)	Grades 3-8, Biology • Requires students to answer two related questions • Two-part items can be MC, MS, and/or TE item types • Two-part Dependent (TPD): Part A **must** be correct in order to earn credit for Part B • Two-part Independent (TPI): each part is scored independently	2 points

Technology Enhanced (TE)	Grades 5-8, Biology • Uses interactive technology, such as, but not limited to, drag and drop, dropdown menus, hot spots, and text highlighting	1 or 2 points
Constructed Response (CR)	Grades 3-8, Biology • Appear at the end of some item sets • Allows students to demonstrate understanding by writing a brief response that uses knowledge of science content and/or stimulus materials	2-point rubric
Extended Response (ER)	Grades 3-8, Biology • Appears at the end of the task set • Allows students to analyze and/or evaluate claims by writing an in-depth response incorporating knowledge of science content along with evidence from the stimulus materials	Grades 3 and 4 - (Practice test only) • 6-point rubric Grades 5-8, Biology • 9-point rubric

Accessing the Practice Tests

The Practice Test Quick Start Guide provides information about the purpose of the practice test, test administration, scoring, and reporting. To access the grade 3 paper-based practice test and grades 3-8 answer keys, use the links in the table below. These resources are also available in DRC INSIGHT Portal (eDIRECT).

Grade/Course in Science	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Biology
Computer-Based Answer Key	Answer Key	Answer Key	Answer Key	Answer Key	Answer Key	Answer Key	Answer Key
Paper-Based Test and Answer Key	Practice Test Answer Key	Not Available for grades four through eight.					

The computer-based practice tests for grades 3-8 and Biology are available in INSIGHT. Teachers may access the online practice tests by copying and pasting the link into Google Chrome: https://wbte.drcedirect.com/LA/#portal/la/510848/ott/8/username/password/false. The table below contains the user names to log into teacher access; **the password for all grades/courses and content areas is teach2025.**

Grade/Course in Science	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Biology
Username	sci03	sci04	sci05	sci06	sci07	sci08	bio

Administering and Scoring the Practice Tests

The DRC INSIGHT Portal (eDIRECT) User Guide provides directions on how to prepare for the online administration of the practice test.

The CBTs are scored using a combination of automated and teacher scoring. Selected-response (e.g., multiple choice, multiple select, and evidence-based), technology-enhanced, and short-answer responses are automatically scored by the online system, while written responses are scored by teachers. The DRC INSIGHT Portal (eDIRECT) User Guide explains how teachers access and use the Educator Scoring application in DRC INSIGHT Portal (eDIRECT) to score students' answers to constructed- and extended-response tasks. Prior to using the Educator Scoring application, teachers should retrieve the scoring rubrics from the answer key documents, found in the Practice Test Library or DRC INSIGHT Portal (eDIRECT) (available in the General Information tab under Documents). All items on the PBTs are scored by teachers using the PBT answer keys.

Additionally, the DRC INSIGHT Portal (eDIRECT) User Guide outlines how to access the CBT reports and explains the reports provided.

Scoring Activity

We recommend that teachers use the scoring activity to develop their own scoring materials. This activity, when done with a group of teachers who teach the same grade level/course, can be invaluable. By analyzing the rubrics, choosing papers at each score point, and discussing the scoring of student papers collaboratively, teachers not only gain a better understanding of expectations for student writing, they also discover strengths and weaknesses and how they might be addressed within their own classroom or within their school systems.

Teachers can use the same activity with students as well. By having students work through the scoring process, they learn so much about what is expected, and they see the rubric in action as they score and discuss other students' papers.

We also encourage school and school system leaders to incorporate the scoring activity into their professional development and/or set aside time for teachers to engage in the kind of discussions about student work that are at the heart of the scoring activity.

Scoring Activity: Scoring Student Writing Using Rubrics

PURPOSE: To establish common expectations for student expression of scientific knowledge and understanding

OUTCOMES:

- Learn to use a rubric/scoring notes and identify qualities of strong CR and ER responses
- Reveal grade-specific expectations in a school
- Learn about and discuss different approaches that can improve instruction

PROCESS:

1. Have students respond to the same ER or CR.
   a. Session 2 of each practice test contains extended-response items.
   b. Session 1 and Session 3 of the practice test contain constructed-response items.
2. Collect students' responses.
3. Work collaboratively to understand the rubric/scoring notes.
   a. Review the scoring criteria on the chosen rubric/scoring notes. Carefully read through each. Highlight the key words that show the differences between each score.
   b. Create anchor papers. These are papers that all participants agree represent a solid score. Annotate the papers to identify which qualities match the rubric/scoring notes. They will serve as models of each score point on the rubric/scoring notes.
   c. Score the responses collaboratively.
4. Individually score the responses using the rubric/scoring notes and anchor sets.
   a. Then come together as a group. Read each response aloud and, as a group, discuss the individual scores using the rubric/scoring notes and the anchor papers.
   b. Try to reach consensus on the scores for each rubric/scoring notes. Discuss any scores that are inconsistent.
5. After the responses are scored, discuss the responses in general — strengths, weaknesses, different approaches to the item, etc. Determine any patterns that exist in the responses as a whole (e.g., limited use of prior knowledge, minimal evidence from sources, invalid or weak analysis of claims, difficulty making connections). Individual teachers should also consider their own students' papers to determine any patterns.

6. Finally, discuss the instructional implications: How will we address the general weaknesses? How will I address my own students' weaknesses, etc.? Develop a plan.

Resources

Assessment Guidance Library

- Assessment Development Educator Review Committees: describes the item development process and the associated committees, includes information on applying for participation
- LEAP 2025 Assessment Guides for Science and Biology: provides information about the operational test for grades 3 through 8 and Biology

Practice Test Library

- LEAP 2025 Practice Test Answer Keys: includes answer keys, scoring rubrics, and alignment information
- Practice Test Quick Start Guide: provides information regarding administration and scoring

Assessment Library

- 2021-2022 Louisiana Assessment Calendar: includes information on testing windows for test administrations
- LEAP Accessibility and Accommodations Manual: provides information about accessibility and accommodations
- LEAP 2025 Technology Enhanced Item Types: provides a summary of technology enhanced items students may encounter across courses and grade-levels

DRC INSIGHT Portal (eDIRECT)

- includes tutorials, manuals, and user guides

EAGLE

- instructional resources in grade-level documents that teachers can download from the EAGLE webpage and incorporate into their daily instruction; contact school test coordinator for instructions on accessing the files

INSIGHT™

- LEAP 2025 Practice Test: helps prepare students for the test
- Online Tools Training: provides opportunity to become familiar with the online testing platform and its available tools

K-12 Science Planning Resources Library

- K-12 Louisiana Student Standards for Science (2017): details science performance expectations and three-dimensional learning
- Planning Guide for Science Instruction: assists educators in planning with high quality curriculum
- K-12 Science Resources: contains resources and supporting instructional materials and tasks

Contact Us

- AskLDOE: electronic ticket system
- assessment@la.gov for assessment questions
- classroomsupporttoolbox@la.gov for curriculum and instruction questions

Newsroom: archived copies of newsletters including LDOE Weekly School System Newsletters and Teacher Leader Newsletter