LOUISIANA DEPARTMENT OF EDUCATION

Office of Assessments, Accountability, and Analytics

LEAP Connect Assessment Guide

High School English Language Arts, Mathematics, and Science

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Purpose

The LEAP Connect Assessment Guide is designed to assist Louisiana educators in understanding the LEAP Connect assessments in English language arts (ELA), Mathematics, and Science for high school.

Introduction

Louisiana is building an educational system that ensures all students are ready for the next level of study by building knowledge of the world, accessing meaningful texts, expressing ideas, and solving complex problems. Through this, Louisiana is creating an equitable system for students with significant cognitive disabilities. Over the past few years, much progress has been made to deliver on this belief including:

- the Louisiana Connectors (LCs) for Students with Significant Cognitive Disabilities in English language arts (ELA), mathematics, and science that establish high expectations for students with significant cognitive disabilities, with instructional resources for educators;
- alternate assessments (LEAP Connect) in ELA, mathematics, and science aligned to the LCs to measure student progress; and
- an established graduation pathway to a high school diploma for students assessed on the alternate assessments.

Federal law requires states to administer annual assessments to all students, including students with significant cognitive disabilities, to measure progress towards challenging academic content standards. The LEAP 2025 assessments measure student proficiency in the content and skills detailed by the Louisiana Student Standards (LSS), and the LEAP Connect assessments measure student proficiency in the content and skills detailed by the Louisiana Connectors (LCs) for Students with Significant Cognitive Disabilities. The LCs represent the “big ideas” of the content and skills found in the LSS. The LEAP

Connect format allows students to participate in academic assessments that are sensitive to measuring progress in their learning (see R.S.17:24.4(F)(3) and R.S.17:183.1-17:183.3).

Participation Requirements

To be eligible to participate in the LEAP Connect assessments, an IEP team must verify that the student has a disability which significantly impacts cognitive functioning and meets the criteria outlined in Bulletin 1530 §505. Additional information can be found in the "Alternate Assessment" section of the Students with Significant Cognitive Disabilities Library. Eligible students will take the LEAP Connect assessments for ELA, mathematics, and science in high school by grade 11, as required by Sections 1111(b)(1)(E) and 8401 of the Elementary and Secondary Education Act of 1965.

Assessment Design

Standards, Connectors, and Complexity Levels

The LCs for ELA, mathematics, and science for kindergarten through high school focus on the "big ideas" found in the LSS for ELA, mathematics, and science. The LCs provide developmentally appropriate and challenging content to guide curriculum and assessment development for students with significant cognitive disabilities. The LEAP Connect assessments align to the ELA, mathematics, and science LCs, which identify the:

- most salient grade-level academic content found in the LSS for ELA, mathematics, and science; and
- core content knowledge and skills needed at each grade to provide success at the next.

Instructional resources developed for the LCs include Essential Elements Cards, Science Component Cards, Trainings, and the Prioritized Connectors Guide each briefly described in the Resources section of this document.

The assessments include items with multiple levels of complexity and varying degrees of scaffolds and supports to provide opportunities for students to show what they know and can do. The LEAP Connect assessment items each represent one of four levels of complexity (Tiers 1-4), designed to follow instructional practices. Tier 1 and Tier 2 questions reflect the higher level of support needed when students begin to learn a new skill or acquire new knowledge. Tier 3 and Tier 4 questions reflect the lower level of support needed as students learn and develop mastery of that skill or knowledge (see Table 1).

Table 1. LEAP Connect Complexity Levels

Content	Tier 1	Tier 2	Tier 3	Tier 4
ELA	• short text with repeated ideas • simple vocabulary words • provides a specific "listen for" statement related to the item	• text with straightforward ideas • provides a brief description of the item topic and simple definitions of terms • provides a "listen for" statement related to the assessed skill	• text with clear ideas • provides some detail about the item topic and definitions of terms • provides statement reminding students what the item is about	• text with detailed and implied ideas • provides statement reminding students what the item is about

Content	Tier 1	Tier 2	Tier 3	Tier 4
Math	• supports use of hands-on concrete materials	• successive model that guides one step at a time • simplified language and/or visual representations • few data points • increase magnitude of numbers	• model that shows solution to a similar problem • simplified language • additional number of data points • further increase in magnitude of numbers	• statement reminding student what the item is about
Science	• statement reminding students what the item is about • simplified language and/or visual representations • short answer options often supported with graphics	• statement reminding students what the item is about • simplified language and/or visual representations (e.g., line drawings) • provides definitions of scientific terms • distinct answer options • may contain graphics support in answer options	• statement reminding students what the item is about • limited use of line drawings • may include charts, tables, maps, graphs, or other visual representations • may include models • do not contain graphics support unless necessary	• statement reminding students what the item is about • may include charts, tables, maps, graphs, or other visual representations • may require inference or prediction • distractors may include misunderstandings of the concept or skill

Description of Item Types

The LEAP Connect assessments include two types of items.

- Multiple-choice (MC) items are questions in which the student selects one answer from two (Tier 1) or three (Tiers 2-4) options.
    - Multiple-part ELA Writing items are a group of MC questions that the student must respond to in sequential order; often there are directions indicating that a student cannot return to the previous item. The student earns points for the group as a whole, not for each item in the group. Each item is scored for accuracy and then a group score of up to two points is applied based on the number of correct items in the group. Partial credit of one point is available.
    - Multiple-part ELA Reading Set and Science Set items are a group of MC questions that the student must respond to in sequential order; often there are directions indicating that a student cannot return to the previous item. The student earns one point for each item within the set. These are not scored as groups.
- Constructed response (CR) items differ in design and purpose according to the content or skill being assessed. The test administrator is required to administer these items directly to the student.
    - In ELA, the student will produce a response to a writing prompt. The ELA writing CR is scored by professionally trained scorers using a 3-dimensional rubric. The ELA Writing CR rubric for high school is found in Appendix A.

- In science, the student will complete tasks. The test administrator will score the student's responses according to the provided rubrics and record the student's scores in the online test platform.

Reporting

Student performance on the LEAP Connect assessments is reported by achievement level and overall score. Achievement Level Descriptors (ALDs) are also included in the student-level reports. The ALDs describe the knowledge and skills students generally demonstrate at each level. The LEAP Connect Interpretive Guide and the Parent Guide to the LEAP Connect Student Reports describe the assessments so that school systems, school administrators, teachers, and parents will be able to use the results effectively.

LEAP Connect English Language Arts (ELA) Design

The LEAP Connect ELA assessment measures reading comprehension of grade-appropriate literary and informational texts, vocabulary, and writing. Reading items measure the student's reading comprehension, decoding skills, and vocabulary understanding, with both literary and informational texts in grade-appropriate contexts. One of the LCs requires evaluation of comprehension across two passages. These skills are measured using "paired passage sets." All paired passages are informational texts. Writing items assess the student's composition skills development. High school focuses on explanatory composition in Session 3 and argumentative composition in Sessions 3 and 4. The LEAP Connect ELA assessments have four sessions – two reading, two writing.

Table 2. LEAP Connect Reading and Writing Sessions

Reading Sessions			Writing Sessions			
Session Number	Passage Sets	Total MC Items	Session Number	Total MC Items	Writing Sets*	Total CR Items**
Session 1	3	19	Session 3	4	1 set of 6	0
Session 2	2	10	Session 4	0	0	1

*The student will earn a score of 2 points for the set if 3 or more of the items are answered correctly. Partial credit of 1 point is earned if at least 1 or 2 of the items are answered correctly.
**The student constructs a story or an essay worth 9 points, 3 points for each dimension of the rubric.

A field-test writing set with 6 MC items is embedded in session 3. The student's responses to the field-test set questions are not part of the student's test score. Information from the field-test set may be used by the LDOE to inform future test development.

Table 3. Percent Representation Per ELA Domain

Domain	Percent Representation
Reading Literature	18%
Reading Informational	34%
Reading Vocabulary	8%
Writing	40%

LEAP Connect Mathematics Design

The LEAP Connect mathematics assessment in high school focuses on problem solving and reasoning. The test has two sessions. Table 4 shows the number of items by session and type.

Table 4. LEAP Connect Mathematics Design

Session	Items	Number
1	MC	17
	Field test	3
2	MC	18
	Field test	3

Table 5. Percent Representation Per Mathematics Domain

Domain	Percent Representation
Number and Quantity	14%
Algebra	49%
Geometry	11%
Statistics and Probability	26%

LEAP Connect Science Design

The LEAP Connect science assessment in high school focuses on life science content. The test has two sessions.

Table 6. LEAP Connect Science Design

Session	Items	Number
1	MC	14
	CR	1
	Field test	2
2	MC	13
	CR	2
	Field test	4

The student's responses to the field-test items are not part of the student's test score. Information from the field-test items may be used by the LDOE to inform future test development.

Table 7. Percent Representation Per Science Domain

Domain	Percent Representation
Molecules to Organisms	40%
Ecosystems	20%
Heredity	20%
Biological Evolution	20%

Test Administration

The LEAP Connect ELA, mathematics, and science assessments are administered as computer-based tests (CBT) in a one-to-one setting. The test administrator will use the online test platform, the Test Administrator Manual, Directions for Test Administration, and reference materials for grade-specific item presentation and response collection to prepare for and administer the test. All passages, items, and response options are designed to be read to the students by the testing platform or the test administrator. Tests are untimed and allow for breaks between questions or sessions. The test administrator may pause the test as needed to best accommodate the student.

The LEAP Connect testing window is February 10 - March 19, 2025.

The student or the test administrator will record the student's answers to all questions into the online testing system. Answering the ELA writing CR requires entering text into the response boxes; all other items require the selection of an option with the pointer tool. The LEAP Connect assessments include accessibility features for all students who take the test. Students should respond to MC and CR items based on their preferred mode of communication (e.g., eye gaze, assistive technology, point to a picture, etc.). Nearly all the mathematics and science items on the LEAP Connect assessments contain visual stimuli to assist students with determining an answer. The assessment items indicate when students may use calculators. Any student with an IEP accommodation for calculator use may use a calculator for every assessment item. While an online calculator is provided, students may use the handheld calculator they typically use during instruction on the mathematics test.

Online tools provide additional accessibility for all students. The tools allow a student to select answer choices, "mark" items, eliminate answer options, take notes, enlarge the item, guide the reading of a text or an item line by line, cover part of the screen, and use a calculator. A help tool is also featured to assist students as they use the online system.

- Pointer
- Highlighter
- Cross-off
- Sticky note
- Magnifier
- Line guide
- Masking
- Help
- Calculator

All students who will enter their own responses and test administrators who will enter responses should work through the Online Tools Training (OTT) to practice using the online tools so they are well prepared to navigate the online testing system. Directions for Administration and Reference Materials for the OTT are available in the DRC INSIGHT Portal (eDirect) and in the LDOE Assessment Guidance library.

Student Response Check

Administering the Student Response Check (SRC) provides an opportunity for a test administrator who is not a student's classroom teacher to observe the student's preferred mode of response and practice entering the response into the system. The student need not respond correctly to any of the items; rather, the purpose is to determine whether the student can indicate a response using their preferred mode of communication and the test administrator can clearly identify the student's response to each item. If the student's response is not observable by the test administrator, the test administrator cannot enter the

student's response into DRC INSIGHT. Teachers and test administrators may access the SRC through INSIGHT or through the LEAP Connect Online Tools Training by selecting 'Student Response Check.'

Vocabulary List

Appendix B includes a list of vocabulary that students may encounter while taking the LEAP Connect assessments. This vocabulary list may be used for ASL translation, object replacement, tactile graphics, word boards or word banks, and AT/AAC devices. It should be reviewed prior to testing and incorporated into instruction.

Permitted Testing Materials

Each test comes with reference materials that contain visual stimuli, formulas, a list of manipulatives, and the answer options for each test question. Some of the reference materials will need to be copied and cut out for student use. Some of the materials will be used as stimuli for CR items or to assist with answering SR items. The Directions for Test Administration (DTA) contains scripted instructions for the test administrator to provide specific materials to the student. The answer options may be copied and used with eye gaze boards as needed. All reference materials must be securely destroyed after testing has completed, including used scratch paper. Additional graphic files are available upon request through the District Test Coordinators (DTCs.).

Sample Test Items

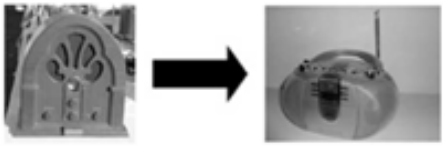
Reading Sample Test Items

Connector: LC.RI.11-12.6a	Complexity: Tier 2	Key: C

We are going to read an informational text about the invention of the radio and television. After we read, you will be asked questions about details that support a conclusion.

The Impact of Radio and Television

There were two important inventions in the 20th century, radio and television. These two inventions changed people's daily lives.



Radio

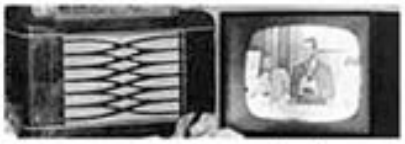
The first radio transmitted the human voice in 1900. The radio was originally invented to send messages. Americans used radios for the first time to listen to music, news, and entertainment programs. By the 1930s, more than half of American homes had a radio. For the first time, people could hear breaking news from around the world while in their homes.

Television

Television was even more popular than the radio. It was invented in 1926. It allowed people to watch moving pictures in their own homes. At first, television shows were broadcast using black and white pictures. In 1953, television shows became available in color. By 1978, almost every family in America had at least one television in their home. Now people could see live images from around the world.

The invention of radio and television has had a great impact on our daily lives. Today, radios and televisions are widely used at home and in classrooms. Think how different your life would be without radios or televisions.

From reading the text you can conclude that radio changed people's daily lives. Which detail supports that radio changed people's daily lives?

Ⓐ 

There were two important inventions in the 20th century.

Ⓑ 

Television was more popular than the radio.

Ⓒ 

Americans used radio for the first time to listen to music.

Writing Sample Constructed-Response

Connector: LC.W.11-12	Complexity: Tier 2	Key: Rubric

You are going to write a persuasive essay about why schools should have an arts club. In a persuasive essay, you try to convince someone else to agree with you. First, I will read an example of a persuasive essay.

This is an example of a persuasive essay. The topic is planting trees. The author makes the claim that the city should plant more trees.

Plant More Trees

In this essay, I will convince you that the city should plant more trees. One reason is that trees are helpful.

It is important to have trees because they provide shade for people to stay cool. Also, trees provide oxygen that helps us breathe.

In conclusion, I hope you are convinced that the city should plant more trees. This is important because trees are helpful.

Why School Should Have an Arts Club

In this essay, I will convince you that

One reason

It is important to

Also,

For Test Administrator use if annotations are necessary

Math Sample Test Items

Connector: LC.A1: N-Q.A.1b	Complexity: Tier 1	Key: B

This item is about using measurements shown in a data table.

A store sells paint in one-gallon cans. The number of gallons of paint and the equivalent number of quarts are shown in this data table.

Gallons to Quarts

Gallons of Paint	Number of Quarts
	4
	8
	12

There are 4 quarts in one gallon of paint.

How many quarts are in 3 gallons of paint?

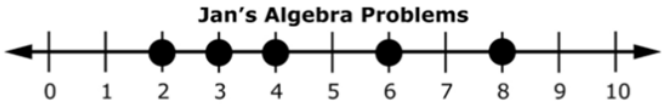
ⓐ 8 quarts

ⓑ 12 quarts

Connector: LC.A1-5:5-ID.A.2a	Complexity: Tier 1	Key: B

This item is about a number line.

This is a number line.



The least value is farthest to the left on the number line.

The greatest value is farthest to the right on the number line.

Jan does algebra problems. The dots on the number line show how many algebra problems Jan did in each of her math classes last week.

What is the greatest number of algebra problems Jan did in math class last week?

ⓐ 2

ⓑ 8

Connector: LC.A1: A-CED.A.1	Complexity: Tier 3	Key: A

This item is about a data table of values and an equation.

A pet shop owner sells fish tanks containing white minnows and goldfish. This data table shows how many white minnows and goldfish are in the different tanks.

Fish Tank Choices

Number of White Minnows (w)	Number of Goldfish (g)
2	4
4	6
6	8
?	10

The data table shows that the pet shop owner always places 2 more goldfish than white minnows into each tank. The information in the data table can be used to write an equation.

$$w + 2 = g$$

The letter **w** stands for the number of white minnows.

The number 2 is how many more goldfish than white minnows are in the tank.

The letter **g** stands for the number of goldfish.

This equation can be used to find the number of white minnows in a tank when the pet shop owner places 10 goldfish in the tank.

$$w + 2 = 10$$

This is another problem about a data table of values and an equation.

A different pet shop owner sells fish tanks containing fish. She always places 4 more tetras than guppies into each tank. This data table shows how many guppies and tetras are in the different tanks.

Fish Tank Choices

Number of Guppies (g)	Number of Tetras (t)
3	7
6	10
9	13
?	15

Which equation can be used to find the number of guppies placed in each tank, **g**, when 15 tetras are placed in a tank?

(a) **g** + 4 = 15

(b) 15 + 4 = **g**

(c) **g** + 15 = 4

Science Sample Test Items

Connector: LC.HS.LS1.2a	Complexity: Tier 1	Key: B

This item is about the human body.

Humans are made up of many different organs. Different organs have different functions.

Which organ is used to pump blood throughout the body?

(a)

brain

(b)

heart

Connector: LC.HS.LS2.6a	Complexity: Tier 3	Key: C

This item is about humans and the environment.

Humans interact with their environment every day. Some interactions are harmful to the environment.

Humans can pollute the land, water, and air with trash. For example, millions of tons of trash are dumped into the oceans each year.

How can pollution caused by humans affect the environment?

(a) About 18 million acres of trees are cut every year for wood.

(b) Arctic ice and glaciers are melting and raising ocean levels.

(c) A whale died because it ate a large amount of garbage.

Connector: LC.HS.LS4.2b	Complexity: Tier 3	Key: C

This item is about how animals survive in their environment.

For example, if brown rabbits and white rabbits are living in a snowy environment, the white rabbit is more likely to survive. The white rabbit is less noticeable against the white snow.

Select to Enlarge

What characteristic helps the white rabbit survive?

(a) being very quiet

(b) having a fluffy tail

(c) blending in with its environment

Connector: LC.HS.LS3.3a	Complexity: Tier 3	Key: Rubric

This item is about the Punnett square.

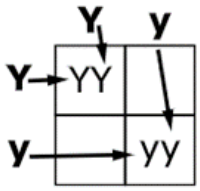
A Punnett square represents how alleles could be inherited when two organisms reproduce.

In this cross, “Y” stands for yellow peas and “y” stands for green peas. For pea color, yellow is a dominant trait and green is the recessive trait.

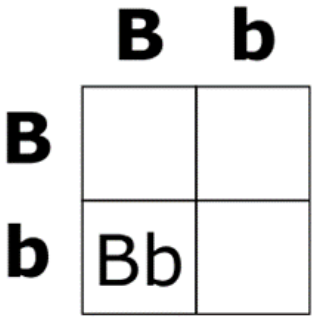
Both parents are heterozygous for color. Heterozygous means both parents have two different alleles (Yy) and are yellow.

Each offspring represented by a box in the Punnett square inherits letters from its row and column. For example, one “Y” from the mother and one “Y” from the father combine in the top left cell. This creates an offspring with yellow peas described as “YY.”

A different combination occurs when one “y” from the mother and one “y” from the father combine in the bottom right cell. This creates an offspring with green peas described as “yy.”



This is another Punnett square.



In this cross, “B” stands for brown eyes and “b” stands for blue eyes. For eye color in humans, brown is a dominant trait and blue is the recessive trait. Both parents are heterozygous for eye color (Bb) and they both have brown eyes.

The first combination is done. One “B” from the mother and one “b” from the father combine in the bottom left cell. This creates an offspring with brown eyes described as “Bb.”

What color eyes could their offspring have?

These are the tiles to use to complete the Punnett square.

BB Bb bb

Place the tiles to complete the Punnett square.

(a) The student provided the correct answer.

(b) The student did not provide the correct answer.

Rubric

Score	Description
1	Student correctly places “BB” in the first box of the top row, “Bb” in the second box of the top row, and “bb” in the bottom box.
0	Student does not correctly place all three letter pairs.

Resources

Assessment Guidance Library

- Prioritized Connectors for LEAP Connect Assessments: prioritized connectors for assessment with instructional resources
- Sample CRs: items, directions, and materials for ELA and math
  - ELA: Directions, Reference Materials, Webinar
  - Math: Directions, Reference Materials
- Assessment Development Educator Review Committees: describes development process and includes information about participation
- OTT Directions for Administration and OTT Reference Materials: provides directions and materials for the OTTs

Practice Test Library

- LEAP Connect Practice Tests
  - ELA: Directions, Reference, Key, Graphics
  - Math: Directions, Reference, Key, Graphics
  - Science: Directions, Reference, Key, Graphics
- LEAP Connect Practice Test Quick Start Guide: information regarding administration and scoring of the online practice tests
- Procedures for Administering the Practice Tests to Students who are Visually Impaired, Deaf, or Deaf-Blind: provides guidance about administration for visually impaired, deaf, or deaf-blind

Assessment Library

- Achievement Level Descriptors: knowledge, skills, and processes students may be able to demonstrate at each level of achievement

DRC INSIGHT Portal (eDIRECT): access to tutorials, manuals, and guides

INSIGHT™

- Online Tools Training: allows students to become familiar with the online tools; also available here using the Google Chrome browser
- LEAP Connect Practice Tests for ELA, Math, and Science: helps prepare students and teachers for the LEAP Connect assessments

Students with Significant Cognitive Disabilities Library

- K-12 Louisiana Connectors for Students with Significant Disabilities: describes academic content to be taught at each grade
- ELA Guidebook Companion Resources: adapted ELA resources
- Essential Elements Cards: guidance for teaching ELA and math
- Science Component Cards: guidance for teaching science
- Alternate Assessment Information, Policy, Guidance, and FAQ

assessment@la.gov: email regarding statewide assessments

specialeducation@la.gov: email regarding policy and services

diverselearnersupport@la.gov: email regarding academic supports

Appendix A: Rubrics

Table 7. Writing Argument Rubric

Rubric Elements	Full Evidence	Partial Evidence	Limited Evidence	No/Unrelated Evidence
Organization The essay addresses a specified claim supported with organized complex ideas.	The essay includes at a minimum: • an introduction that states the claim and a rational reason • a conclusion that states the claim and the rational reason	The essay includes at a minimum: • an introduction that states the claim or a reason • a conclusion that states the claim or the reason	The essay includes at a minimum some evidence related to the specified claim/ topic (i.e., introduction, claim/topic, or conclusion).	There is no evidence of organization or the evidence is off topic.
Idea Development The defended claim includes relevant evidence, and uses words, phrases, and clauses to clarify the relationship among claim, reasons, and evidence.	The essay includes at a minimum: • the body includes two relevant facts or examples • words or phrases to connect the reason with one relevant fact or example	The essay includes at a minimum: • the body includes only one relevant fact or example • word or phrases to connect the reason with one fact or example	The essay includes at a minimum a word related to the reason.	There is no evidence of idea development or the evidence is off topic.
Conventions The student uses standard English conventions (subject-verb agreement).	The essay includes more than one sentence and at a minimum: • end punctuation for more than one thought unit • one complete sentence with subject-verb agreement using student-generated text	The essay includes at a minimum: • end punctuation for one thought unit • one complete sentence with or without subject-verb agreement using student-generated text	The essay includes at a minimum one use of Standard English conventions.	There is no evidence of Standard English conventions.

Appendix B: Vocabulary Lists

Table 10. High School Vocabulary List

English Language Arts				
Author	describe	form	period	summary
central idea	detail	introduction	persuasive	text
Claim	edit	key details	phrase	timeline
Compare	effect	main idea	point of view	topic
Conclusion	essay	organize	punctuation	
Contrast	exclamation point	paragraph	question mark	
Mathematics				
Angle	data table	figure	mean	similar
Area	dimensions	formula	measurement	temperature
Average	divided	graph	model	triangle
Centimeters	equal	greatest	multiplication	unit
Convert	equation	height	pattern	value
corresponding	exponent	histogram	problem	volume
Cost	expression	hypotenuse	rate	weight
Cube	extension	least	relationship	x-axis
Data	Fahrenheit	length	shape	y-axis
Science				
algae	enzyme	immunity	organism	soot
allele	esophagus	immunization	parasite	species
ancestor	evidence	infection	phenomena	stable/stability
bacteria/bacterial	experiment	infectious	phenotype	starches
behavior	fungus/fungi	integumentary	pollute	survival
breed	gastric juices	interactions	pollution	territory
camouflage	gene	likelihood	predator	trait
characteristic	genetic trait	microorganisms	Punnett square	unstable
digestive system	habitat	natural selection	recessive	vaccine
dominant	heart rate	nutrients	recycle	vaccination
ecosystem	heterozygous	offspring	reproduction	virus/viral
environment	homozygous	organ	salivary glands	wetlands

Updates Log

The table below lists any updates made to this document after the original posting date.

Available	Description of Updates
August 2024	Document original posting for 2024-2025

Email assessment@la.gov with any questions or comments about this assessment guide.