



California Assessment of Student
Performance and Progress

California Alternate Assessment Practice Test Scoring Guide



Life Sciences High School

California Alternate Assessment for Science Practice Test Scoring Guide

Table of Contents

Assessed Standards	1
HS-LS1-4 From Molecules to Organisms: Structures and Processes	2
HS-LS2-2 Ecosystems: Interactions, Energy, and Dynamics	3
Introduction to Practice Test Scoring Guide	4
Example of Item Metadata	5
High School Life Sciences Practice Test Items	6

Assessed Standards

The California Alternate Assessment (CAA) for Science measures the Science Core Content Connectors (Science Connectors) and is administered to students with the most significant cognitive disabilities in grades five and eight and once in high school (i.e., grade ten, eleven, or twelve). The Science Connectors are derived from the California Next Generation Science Standards (CA NGSS) performance expectations (PEs). They provide alternate standards to guide science instruction and assessment for students with the most significant cognitive disabilities. The PEs that the assessed Science Connectors are derived from can be found in the CAA for Science blueprint document at <https://www.cde.ca.gov/ta/tg/ca/documents/caascienceblueprint.docx>.

These Science Connectors are further broken down into assessment targets. The assessment targets are comprised of the focal knowledge, skills, and abilities (FKSAs), which describe what students should know and be able to do in science; at the simplest level, the essential understandings (EUs) are the basic scientific concepts that students should understand. This is presented as a continuum in the figure that follows.



This practice test is intended to assess Science Connectors HS-LS1-4 and HS-LS2-2.

HS-LS1-4 From Molecules to Organisms: Structures and Processes

Identify how growth occurs when cells multiply (mitosis) by using a model.

Table 1. HS-LS1-4, FKSA and EU

Assessment Target	Definition	Students Will Be Able To...
FKSA	<ul style="list-style-type: none"> Ability to use a model to identify how organisms grow in size through the process of mitosis. (FKSA 1) 	<ul style="list-style-type: none"> Recognize an example of an organism growing by increasing the number of cells Identify examples of cell division Identify the correct order for the process of one cell dividing to become up to four cells
EU	<ul style="list-style-type: none"> Recognize that organisms are composed of a collection of different types of cells. 	<ul style="list-style-type: none"> Identify an example of a structure made of more than one kind of cell Recognize organisms that are made of more than one kind of cell

HS-LS2-2 Ecosystems: Interactions, Energy, and Dynamics

Use mathematical representations (e.g., trends, averages, graphs) to identify dependencies of an animal population on other organisms for food and their environment for shelter.

Table 2. HS-LS2-2, FKSA and EU

Assessment Target	Definition	Students Will Be Able To...
FKSA	<ul style="list-style-type: none"> Ability to use mathematical representations to identify dependencies of an animal population on other organisms for food and their environment for shelter. (FKSA 1) 	<ul style="list-style-type: none"> Use data from a graph or data table to identify the effect on a population of organisms of an increase or decrease in food or shelter resources Use data from a graph or data table to identify the cause of a change in the size of a population of organisms
EU	<ul style="list-style-type: none"> Identify factors (e.g., competition) that affect the numbers of organisms in an ecosystem. 	<ul style="list-style-type: none"> Recognize the effect on a population of organisms when there is a significant increase or decrease in the availability of food or shelter

Introduction to Practice Test Scoring Guide

The *CAA for Science Practice Test Scoring Guide* provides details about the items, assessment targets, correct responses, and related scoring considerations for the CAA for Science practice test items. The items selected for the practice test are designed to reflect the student experience while being administered the CAA for Science assessment. This includes

- a range of student response types, and
- a breadth of difficulty levels across the items, ranging from easier to more difficult items.

It is important to note that not all student response types are fully represented on every practice test, but a distribution can be observed across all the practice tests. The items presented are reflective of refinements and adjustments to language based on pilot test results and expert recommendations from both content and accessibility perspectives.

This scoring guide should be used alongside the online practice tests, which can be accessed at <https://www.caaspp.org/practice-and-training/index.html>.

The following information is presented in a metadata table for each item in the practice test.

- Item:** This is the number that corresponds to the test question as it appears in the practice test.
- Key:** This represents the correct answer(s) to the item and includes the score point value for the item and its parts. Items are worth either one or two points.
- Science Connector:** This references the alternate achievement standard linked to a CA NGSS performance expectation.
- Assessment Target:** This references the FKSA or EU that an item is assessing.

All items in a practice test are designed to be administered in conjunction with their corresponding *Directions for Administration (DFA)*. In addition, each practice test contains a nongraded Orienting Activity before each set of items. Please be sure to present the Orienting Activity for each Science Connector to the student before moving on to the items. For more information regarding Orienting Activities, please refer to the [Practice Test Directions for Administration—High School Life Sciences](#).

Example of Item Metadata

Item	Key	Science Connector	Assessment Target
1	B (1 point)	HS-LS1-4	EU: Recognize that organisms are composed of a collection of different types of cells.

High School Life Sciences Practice Test Items

Item	Key	Science Connector	Assessment Target
1	B (1 point)	HS-LS1-4	EU: Recognize that organisms are composed of a collection of different types of cells.
2	A (1 point)	HS-LS1-4	EU: Recognize that organisms are composed of a collection of different types of cells.
3	B (1 point)	HS-LS1-4	FKSA 1: Ability to use a model to identify how organisms grow in size through the process of mitosis.
4	B (1 point)	HS-LS1-4	FKSA 1: Ability to use a model to identify how organisms grow in size through the process of mitosis.
5	<p>First box: one cell</p> <p>Second box: one cell with two nuclei</p> <p>Third box: two cells</p> <p>(2 points) The student matches all three correct responses.</p> <p>(1 point) The student matches one or two of the correct responses, but not all three.</p>	HS-LS1-4	FKSA 1: Ability to use a model to identify how organisms grow in size through the process of mitosis.
6	A (1 point)	HS-LS2-2	EU: Identify factors (e.g., competition) that affect the numbers of organisms in an ecosystem.
7	B (1 point)	HS-LS2-2	EU: Identify factors (e.g., competition) that affect the numbers of organisms in an ecosystem.
8	B (1 point)	HS-LS2-2	FKSA 1: Ability to use mathematical representations to identify dependencies of an animal population on other organisms for food and their environment for shelter.

Item metadata table continuation showing items 9–10

Item	Key	Science Connector	Assessment Target
9	A (1 point)	HS-LS2-2	FKSA 1: Ability to use mathematical representations to identify dependencies of an animal population on other organisms for food and their environment for shelter.
10	Part A: less raccoons (1 point) Part B: B (1 point)	HS-LS2-2	FKSA 1: Ability to use mathematical representations to identify dependencies of an animal population on other organisms for food and their environment for shelter.