**California Alternate Assessment** 

California Assessment of Student Performance and Progress

# Science Administration Planning Guide

*This guide is intended for use by test site coordinators and test examiners to guide, plan, and schedule California Alternate Assessment (CAA) for Science testing between September 17, 2024, and the end of each school district’s 2024–25 instructional calendar.*

*This guide does not contain test content.*

**2024–25**

**Grade Eight, Form** **2** 

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## Introduction

### What is the California Alternate Assessment (CAA) for Science?

The CAA for Science is computer-based and a component of California Assessment Student Performance and Progress (CAASPP). It is intended for students with the most significant cognitive disabilities who have been designated by an individualized education program (IEP) team to use an alternate assessment on statewide summative assessments.

The CAA for Science design philosophy supports the diverse needs of students by ensuring standardization while still allowing flexibility, enabling the greatest range of students to demonstrate their science content knowledge.

### Form Assignments

*Administration Planning Guides* and *Directions for Administration* (*DFAs*)are form-specific.

Each local educational agency (LEA) is assigned **one** of four forms for all CAA for Science administration materials. The exception is for the largest districts, which receive form assignments at the school level. All grade levels within an LEA will have the same form assignment. For example, if an LEA is assigned to Form 1, the LEA will use Form 1 of the *Administration Planning Guides* and *DFAs* for each grade level tested. Form assignments can be found on the [CAA for Science Form Assignments](https://www.caaspp-elpac.org/resources/administration/form-assignments-second-scoring-rsvp/form-assignments--caa-science) web page.

### Purpose and Use of This *Administration Planning Guide*

This guide provides the following:

* Basic information about the CAA for Science administration and test security
* Information about factors to consider when deciding the best time to administer a CAA for Science embedded performance task (PT)
* The science content being assessed this year
* A blank testing planner to assist in determining when to administer each embedded PT

***Administration Planning Guides* are not intended to guide instruction or to limit what science content is taught in the classroom.**

*Administration Planning Guides* are made available in advance to give teachers and test examiners as much time as possible to plan how best to integrate each of the four embedded PTs into the 2024–25 instructional calendar.

The test examiner tutorial necessary to administer the 2024–25 CAA for Science will be available in August 2024. The CAA for Science embedded PTs will be available for administration beginning September 17, 2024.

### Test Security

This guide contains no test content and is not secure but is intended for use only by CAASPP test site coordinators and test examiners for the purposes of planning and scheduling testing. Follow these guidelines to ensure the security of the CAA for Science embedded PTs:

**The downloadable *DFA* and the online embedded PTs, as referenced in this document, contain test content and must be kept secure at all times. *DFA*s should be downloaded only before administering an embedded PT.**

* Access to *DFAs* in the Test Operations Management System is available only to the following user roles: test examiners, site coordinators, and LEA coordinators.
* *DFAs* will be available beginning September 17, 2024.
* Online content in the test delivery system, the downloadable *DFA*, and the orienting activities outlined in the *DFA* must be kept secure. *DFAs* that were printed for test examiners must be kept in a securely locked room or locked cabinet when not in use.
* After an embedded PT has been administered, its *DFA* must be immediately and securely destroyed.
* Any electronic files on the test examiner’s or test site coordinator’s device need to be securely deleted in such a way that the files do not remain in a temporary storage location, such as the Windows Recycle Bin, where they can be restored.
* Once a test examiner begins an embedded PT with a student, it must be completed and submitted in the test delivery system within **45 calendar days** and before the end of the school’s instructional calendar or June 30, 2025, whichever comes first.

### Administering the 2024–25 CAA for Science

The [*Preparing for Administration* (*PFA*)](https://www.caaspp-elpac.org/s/docs/PFA.CAA.Science.Operational.2024-25.pdf) document is located on the CAASPP & ELPAC Website and is available for the 2024–25 test administration. This document should be used to prepare to administer the CAA for Science. The information contained in the *PFA* was previously located at the beginning of the *DFA*. There is one *PFA* used for all grade levels and forms. The *PFA* is a nonsecure document that is available for all LEAs on the Moodle Training Site and on the CAASPP & ELPAC Website, where you can review or print it, if desired.

The 2024–25 CAA for Science is composed of four embedded PTs that are administered online to students.

* Each embedded PT is intended to be **administered shortly after the student has received related science instruction**.
* All four embedded PTs must be attempted by the student to complete the administration.
* The embedded PTs can be administered in any order between September 17, 2024, and the end of the instructional calendar or June 30, 2025, whichever comes first.

Each embedded PT assesses two Science Connectors from the same science domain with two corresponding sets of five test questions, each prefaced by an orienting activity. An orienting activity is a nonscorable activity that is designed to engage and familiarize a student with a science concept that the student was previously taught. In some cases, the test examiner completes hands-on exercises with the student during testing and may be required, beforehand, to prepare some commonly available materials found in the classroom or prepare graphics provided in the *DFA*. **There should not be a need to purchase materials just for testing.**

**The *DFA* will provide test examiners with guidelines on how to individualize the orienting activities and designated items. Please note that all items may be individualized on the basis of the student’s IEP.**

A blank testing planner is provided at the end of this document (refer to table 9) to aid in scheduling administration of each of the embedded PTs for your student(s) based on when the related content will be taught.

## Assessed Standards

The CAA for Science, which is based on the Science Connectors, measures knowledge, skills, and abilities that are appropriate for this student population. The Science Connectors are derived from the California Next Generation Science Standards performance expectations (PEs). They provide alternate standards and alternate science learning goals 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*](https://www.cde.ca.gov/ta/tg/ca/documents/caascienceblueprint.docx) web document.

These Science Connectors are further broken down into assessment targets made up of more discrete focal knowledge, skills, and abilities (FKSAs), which describe what students should know and be able to do in science; and, at the simplest level, the essential understandings (EUs), which are the basic concepts students should know and be able to do in science. This is presented as a continuum in figure 1.



Figure 1. CAA for Science Standards Continuum

Keep this structure in mind as you review the content being assessed this year. Test questions are written to assess the FKSAs and EUs. Each Science Connector has between one and six FKSAs and one EU. The EU will always be assessed, but not all of the FKSAs will be assessed in a single embedded PT; therefore, not all of the FKSAs are provided in this guide. Assessment of Science Connectors with more than one FKSA may occur over multiple years.

The following pages provide the Science Connectors and associated FKSAs and EUs being assessed this year, organized by science domain. The third column of each Connector table contains descriptions of ways in which a student may demonstrate mastery of the FKSA or EU to be assessed. These mastery statements describe specific actions the student will take, such as identifying, recognizing, or comparing information in the Science Connector being assessed, and are found in the column labeled *Students Will Be Able To…*. These statements describe ***only those Science Connectors assessed this year***.

### Earth and Space Sciences Connectors

#### MS-ESS2-1

***Identify relationships between components in a model of energy flows and matter cycles within and among Earth’s systems, including the Sun and Earth’s interior as primary energy sources.***

Table 1. MS-ESS2-1, FKSA and EU

| **Connector Component** | **Definition** | **Students Will Be Able To…** |
| --- | --- | --- |
| FKSA | * Ability to identify relationships between components in a model of energy flows and matter cycles (e.g., weathering, erosion, sedimentation) among Earth’s systems, with the Sun as the primary energy source. (FKSA 1)
* Ability to identify relationships between components in a model of energy flows and matter cycles (e.g., melting, crystallization, deformation) among Earth’s systems, with Earth’s interior as the primary energy source. (FKSA 2)
 | * Identify the role of wind and water in erosion of sediments
* Identify the process of forming layers of rock and soil (sediments)
* Identify examples of rock being melted by the heat from Earth’s core
* Identify examples of melted magma cooling to become solid rock
* Identify the core of Earth as the cause of rocks melting
 |
| EU | * Identify types of Earth materials that can be located at the surface (exterior) and/or in the interior.
 | * Identify common materials used by humans that are found on or in the crust of Earth
 |

#### MS-ESS3-2

***Use resources (e.g., maps, charts, images of natural hazards) to identify patterns in past occurrences of catastrophic events in each of two regions to predict which location may receive a future similar catastrophic event.***

Table 2. MS-ESS3-2, FKSA and EU

| **Connector Component** | **Definition** | **Students Will Be Able To…** |
| --- | --- | --- |
| FKSA | * Use resources (e.g., maps, charts, images of natural hazards) to identify patterns in past occurrences of catastrophic events in each of two regions to predict which location may receive a future similar catastrophic event.
 | * Use information in a map, chart, data table, or image of a natural hazard to identify a pattern in past occurrences of catastrophic events
* Use identified patterns in past occurrences of catastrophic events in each of two regions to predict which location will most likely have a similar catastrophic event
 |
| EU | * Recognize that some natural hazards (e.g., volcanic eruptions, severe weather) can be predicted while others are not predictable.
 | * Recognize examples of natural hazards that can be predicted
* Recognize examples of natural hazards that cannot be predicted
 |

### Life Sciences Connectors

#### MS-LS1-7

*Identify the outcome of the process of breaking down food molecules (e.g., sugar) as the release of energy, which can be used to support other processes within the organism.*

Table 3. MS-LS1-7, FKSA and EU

| **Connector Component** | **Definition** | **Students Will Be Able To…** |
| --- | --- | --- |
| FKSA | * Ability to identify the outcome of the process of breaking down food molecules (e.g., sugar) as the release of energy. (FKSA 1)
* Identify ways in which energy from food can be used to support other processes within the organism. (FKSA 2)
 | * Recognize that humans and animals need food for energy
* Identify examples of life processes that require energy from food
* Recognize that energy from food is used for life processes such as circulation and respiration
* Identify a simple example of the process by which food is broken down and then energy is distributed throughout the body
 |
| EU | * Recognize that food taken in by an organism is broken down and used by an organism for growth.
 | * Recognize an example that shows that humans and animals need food to grow
 |

#### MS-LS2-4

*Identify the outcome using evidence of changes in physical or biological components of an ecosystem to populations of organisms in that ecosystem.*

Table 4. MS-LS2-4, FKSA and EU

| **Connector Component** | **Definition** | **Students Will Be Able To…** |
| --- | --- | --- |
| FKSA | * Ability to identify the outcome of changes in physical or biological components of an ecosystem to populations of organisms in that ecosystem (e.g., some organisms survive and reproduce, some move to new locations, some move into the transformed environment, some die).
 | * Identify a specific effect of a physical or biological change in an ecosystem on a population of organisms
* Use information presented in a graph or data table to identify changes in physical or biological conditions and identify the effect on a population of organism and why the effect occurred
 |
| EU | * Recognize effects of changes in an ecosystem on an organism.
 | * Identify whether a change in an ecosystem helps an individual organism survive or makes it more difficult for the organism to survive
 |

### Physical Sciences Connectors

#### MS-PS1-2

*Using data provided through observation, identify evidence that proves a chemical reaction has taken place (e.g., change in color, gas is created, heat or light is given off or taken in).*

Table 5. MS-PS1-2, FKSA and EU

| **Connector Component** | **Definition** | **Students Will Be Able To…** |
| --- | --- | --- |
| FKSA | * Ability to identify evidence that proves a chemical reaction has taken place.
 | * Recognize that a chemical reaction has occurred
* Identify evidence that a chemical reaction occurred
 |
| EU | * Identify examples of change (e.g., color, temperature).
 | * Identify a chemical change in matter
 |

#### MS-PS2-2

*Recognize that a change in an object’s motion can be due to the mass of the object or the forces acting on the object by using data on the motion of the object.*

Table 6. MS-PS2-2, FKSA and EU

| **Connector Component** | **Definition** | **Students Will Be Able To…** |
| --- | --- | --- |
| FKSA | * Ability to recognize that a change in an object’s motion can be due to the mass of the object by using data on the motion of the object. (FKSA 1)
* Ability to recognize that a change in an object’s motion can be due to the forces acting on the object by using data on the motion of the object. (FKSA 2)
 | * Recognize that an object’s mass will affect the result of the force acting on the object
* Recognize the effect of a force on how the motion of an object changes (speed or direction)
* Use a data table to analyze which object’s motion will be most affected by the same amount of applied force
 |
| EU | * Recognize that a larger force causes a larger change in the motion of an object.
 | * Identify that a stronger push or pull results in a greater change in motion of an object
 |

#### MS-PS3-3

*Use information (e.g., graph, model) to identify a device (e.g., foam cup, insulated box) that either minimizes or maximizes thermal energy transfer (e.g., keeping liquids hot or cold).*

Table 7. MS-PS3-3, FKSA and EU

| **Connector Component** | **Definition** | **Students Will Be Able To…** |
| --- | --- | --- |
| FKSA | * Ability to use information to identify a device that minimizes thermal energy transfer. (FKSA 1)
* Ability to use information to identify a device that maximizes thermal energy transfer. (FKSA 2)
 | * Recognize which object will keep a substance cooler
* Recognize which object will keep a substance warmer
* Use data to compare which object will keep a substance cooler
 |
| EU | * Identify objects used to minimize or maximize thermal energy transfer (e.g., gloves).
 | * Identify objects that keep substances warm
 |

#### MS-PS4-2

*Identify how light waves or sound waves are reflected, absorbed, or transmitted through various materials (e.g., water, air, glass) by using a model.*

Table 8. MS-PS4-2, FKSA and EU

| **Connector Component** | **Definition** | **Students Will Be Able To…** |
| --- | --- | --- |
| FKSA | * Ability to identify how light waves are reflected, absorbed, or transmitted through various materials (e.g., water, air, glass) by using a model. (FKSA 1)
* Ability to identify how sound waves are reflected, absorbed, or transmitted through various materials (e.g., water, air, glass) by using a model. (FKSA 2)
 | * Identify an example in which light is being reflected, absorbed, or transmitted
* Identify an example in which sound is being reflected, absorbed or transmitted
* Identify why a material reflects (material is shiny), absorbs (material is not clear), or transmits (material is clear) light
 |
| EU | * Recognize that light can have different brightness and color.
 | * Recognize an example in which light is changing in intensity (getting brighter or dimmer)
 |

## Testing Planner for Form 2

Use the planner in table 9 to aid in scheduling testing for your student(s) based on when the related content will be taught.

Test Examiner:

School:

Grade:

Table 9. 2024–25 CAA for Science Grade Eight Testing Planner

| **Associated Science Connectors** | **Date(s) Related Instructional Content Will Be Taught** | **Scheduled Testing Date(s)** |
| --- | --- | --- |
| Earth and Space Sciences:MS-ESS2-1MS-ESS3-2 | Add date(s) here: | Add date(s) here: |
| Life Sciences:MS-LS1-7MS-LS2-4 | Add date(s) here: | Add date(s) here: |
| Physical Sciences A:MS-PS1-2MS-PS2-2 | Add date(s) here: | Add date(s) here: |
| Physical Sciences B:MS-PS3-3MS-PS4-2 | Add date(s) here: | Add date(s) here: |