



California Assessment of  
Student Performance and Progress

## **2018–19 CAA for Science Administration Planning Guide: Grade Eight**

*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 January 8, 2019, and the end of your instructional calendar.*

*This guide does not contain test content.*



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## Introduction

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

The CAA for Science is an online California Assessment of Student Performance and Progress (CAASPP) assessment designed for students with the most significant cognitive disabilities and for whom an individualized education program team has designated the use of 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.

### Purpose of This Administration Planning Guide

This guide provides information about what to consider when deciding the best time to administer a CAA for Science performance task to a student, the basic steps to administering a performance task, and what to consider about individualization based upon a student's needs. In addition, this guide informs teachers and test examiners about the two science connectors that are aligned with each performance task and a schedule planner template to assist in the planning of when to administer each performance task.

### Considerations for Planning CAA for Science Testing

Teachers and test examiners should review this guide as early as possible in order to plan how best to integrate each of the three embedded performance tasks (PTs) into the instructional calendar. The directions necessary to administer the actual embedded PTs, called the *Directions for Administration (DFA)*, will be available as downloadable files beginning January 8, 2019. Test examiners should download the assigned version of the performance task *DFA* just prior to the administration of the performance task.

*DFAs* are specific to each embedded PT and to the CAA for Science version assigned to the school. The school-level version assignments can be found on CAASPP.org. To foster test security, download a *DFA* only when preparing to administer a specific embedded PT, and destroy the *DFA* after testing.

The embedded PTs can be administered in any order between January 8 and the end of the instructional calendar or July 15, whichever comes first. Each PT is intended to be administered following related instruction.

### 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 purpose of planning and scheduling testing. Follow these guidelines to ensure security of the CAA for Science embedded PTs:

- **The downloadable *DFA* and the online PTs referred to in this document contain test content and must be kept secure at all times.**
- 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 should be securely deleted from the test examiner’s or test site coordinator’s device in such a way that the file does not remain in a temporary storage location such as Windows’ Recycle Bin, where it can be undeleted.
- 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.

## Questions and Answers About Administration

### What Do I Need to Know About Administering the 2018–19 CAA for Science?

The CAA for Science in 2018–19 is comprised of three embedded PTs that are administered online to students. All three performance tasks must be attempted to complete the administration. Each embedded PT assesses two Science Connectors and two corresponding sets of five test questions, each prefaced by an orienting activity. An orienting activity is nonscorable activity that is designed to engage and familiarize students to a science concept that they were previously taught. In some cases, the test examiner completes hands-on exercises with the student during testing and may be required to prepare some commonly available materials found in the classroom beforehand. **There should not be a need to purchase materials just for testing.**

### When Do I Administer the Embedded PTs?

Test examiners must administer embedded PTs to a student any time during the normal course of instruction between January 8, 2019, and the end of the instructional calendar or July 15, whichever comes first. A list of the Science Connectors being assessed can be found in the next section to assist in planning. The test examiner should administer an embedded PT shortly after the student has received instruction on the two Science Connectors in that specific PT.

Each of the three embedded PTs is available as a separate test in the test delivery system, enabling the test examiner to administer it in any order and at any time. For example, a student learns the concepts in PT 2, “Force and Motion,” in January, and the test examiner administers the PT at the end of January. In March, the student learns the concepts in PT 1, “Ecosystems and Energy,” and the test examiner administers the PT in early April. Finally, the student learns the concepts in PT 3, “Weather and Earth’s Resources,” in late April, and

the test examiner administers the PT in early May, thereby completing the CAA for Science testing requirement for the student.

Table 1 displays a sample of a CAA for Science schedule that shows testing dates based on dates when related instructional content is planned to be taught. A test examiner may use the schedule template on page 11 to enter dates for administering each embedded PT.

**Table 1. Sample 2018–19 CAA for Science Grade Eight Testing Schedule Planner**

PT	Embedded PT Name	Associated Science Connectors	Date(s) Related Instructional Content Will Be Taught	Scheduled Testing Date(s)
1	Ecosystems and Energy	<b>MS-LS2-3:</b> Ecosystems <b>MS-LS2-1:</b> Energy	March 2019	Week of March 25, 2019
2	Force and Motion	<b>MS-PS2-2:</b> Force <b>MS-PS2-1:</b> Motion	January 2019	Week of February 4, 2019
3	Weather and Earth's Resources	<b>MS-ESS2-5:</b> Weather <b>MS-ESS3-4:</b> Earth's Resources	April 2019	Week of May 6, 2019

## How Do I Administer an Embedded PT?

Take the following steps to prepare and administer an embedded PT:

1. Obtain certification to be a test examiner by completing the online, self-guided, CAA Test Examiner Tutorial.
2. Download the version-specific, PT-specific *DFA* document from the [Test Operations Management System](#) to prepare for administering the embedded PT to a student. (For security purposes, do not download the *DFA* any earlier than is necessary to prepare for administration.)
3. Review the *DFA* including the list of materials and instructions to set up any necessary hands-on exercises, depending on individual student need.
4. Review the *DFA* and determine, for each student, whether exemplar orienting activities and items are appropriate or if individualization is needed (where permitted).

5. Gather any associated materials based on the provided materials list. (Note that, in some cases, test examiners may not know whether individualization is required until testing the student is underway.)
6. Log on to the test delivery system with the student. (Remember that CAA testing requires two internet-connected devices.) More information can be found on [How to Start a Test Session for the CAAs](#).
7. Use the *DFA* to guide you through administering the orienting activities and test questions to a student in the online test delivery system.

## Why Might I Individualize an Embedded PT?

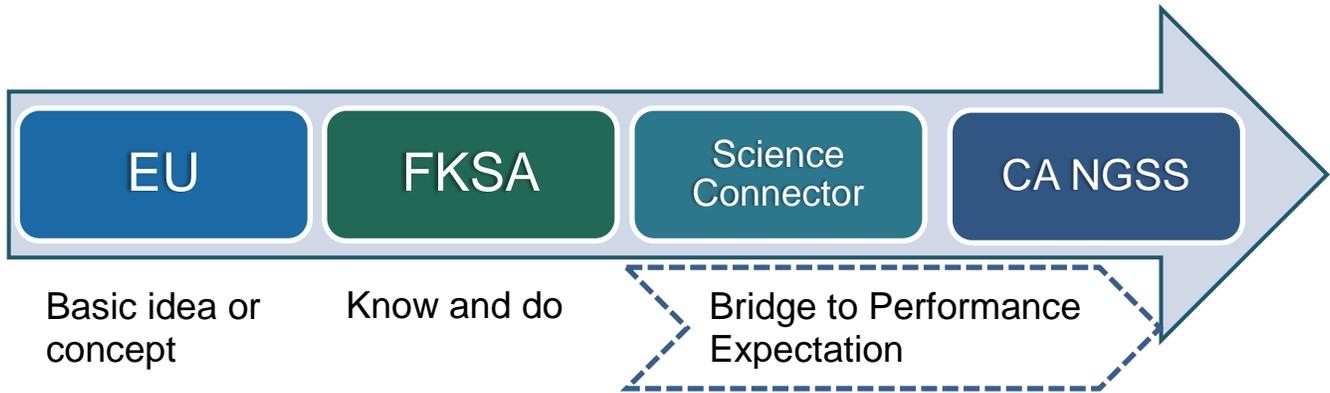
The CAA for Science embedded PTs strike a careful balance between standardized administration and maximizing student engagement. Some orienting activities and test questions can be individualized to improve student engagement. Text examiners may choose individualized options in place of the provided exemplar to make the subject matter more accessible to the student.

**Individualization is on a student-by-student basis and only permitted where explicitly stated in the *DFA*, either in the orienting activity description or in certain specific test questions.**

## Assessed Standards

The CAAs for Science, which are based on the Science Connectors, measure knowledge, skills, and abilities that are appropriate for this student population. The Science Connectors are derived from the 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](#).

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



**Figure 1. CAA Science Standards Continuum**

Keep this structure in mind as you review the content being assessed this year. Test questions are written to assess the FKSA, EUs, and, sometimes, the Science Connector. Each Science Connector has between one and six FKSA, and one EU. The EU will always be assessed, but not all of the FKSA will be assessed in a single embedded PT; therefore, not all the FKSA are provided in this guide. For those Science Connectors with more than one FKSA, assessment of all FKSA will occur over multiple years. In this case, the number of the FKSA being assessed is denoted in parentheses, e.g. “(FKSA 1).”

The following pages provide the six Science Connectors and associated FKSA and EUs for each of the three PTs being assessed this year. Remember that each PT assesses two Science Connectors, so you will see two sets of Science Connector information for each PT. The mastery statements are descriptions of ways in which a student may demonstrate mastery of the FKSA or EU to be assessed. These statements describe specific actions the student will take, such as identifying, recognizing, or comparing information contained in the Connector being assessed. The mastery statements describe **only those Science Connectors assessed this year**, and do **not** necessarily address all of the FKSA associated with a particular Science Connector.

## Task 1: Ecosystems and Energy

### Activity 1 Science Connector: MS-LS2-3—Ecosystems

Using a model, identify energy transfer between producers, consumers, and decomposers in an ecosystem.

Table 2. MS-LS2-3, FKSA and EU for Activity 1

Feature	Definition	How Mastery Is Demonstrated
<b>FKSA</b>	<ul style="list-style-type: none"> <li>Ability to identify energy transfer between producers, consumers, and decomposers in an ecosystem by using a model (e.g., producers get energy from sunlight, producers provide energy for consumers, and decomposers recycle nutrients and matter in the ecosystem).</li> </ul>	<ul style="list-style-type: none"> <li>Recognize food chain models showing the transfer of energy from the sun to producers to consumers.</li> <li>Recognize energy pyramid models showing the transfer of energy from producers to consumers.</li> <li>Use a model to identify the transfer of energy between living and nonliving parts of the ecosystem.</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>Recognize that when people or animals eat plants they are taking energy into their bodies.</li> </ul>	<ul style="list-style-type: none"> <li>Recognize that people take energy into their bodies by eating plants.</li> <li>Recognize that animals take energy into their bodies by eating plants.</li> </ul>

## Activity 2 Science Connector: MS-LS2-1—Energy

**Identify factors in a graph (including resources, climate or competition) in an ecosystem that influence growth in populations of organisms.**

**Table 3. MS-LS2-1, FKSA and EU for Activity 2**

Feature	Definition	How Mastery Is Demonstrated
<b>FKSA</b>	<ul style="list-style-type: none"> <li>• Ability to identify resources in an ecosystem that influence growth in populations of organisms. (FKSA 1)</li> <li>• Ability to identify competition in an ecosystem that influences growth in populations of organisms. (FKSA 3)</li> </ul>	<ul style="list-style-type: none"> <li>• Match a population to a resource which is needed for the population to grow and survive.</li> <li>• Identify how a change in resources affects the population which needs the resources to grow and survive.</li> <li>• Identify the relationship between the size of a population and resource availability.</li> <li>• Recognize that changes in one part of an ecosystem affect other parts of the ecosystem.</li> <li>• Determine how competition for the same resources affect the competing populations.</li> <li>• Identify the relationship between resource availability and what drives competition among organisms or populations of organisms.</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>• Match organisms to their habitats.</li> </ul>	<ul style="list-style-type: none"> <li>• Match organisms to their habitats (e.g., based on characteristics of each organism, needs of the organism, and characteristics of the habitat).</li> </ul>

## Task 2: Force and Motion

### Activity 1 Science Connector: MS-PS2-2—Force

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 4. MS-PS2-2, FKSA and EU for Activity 1

Feature	Definition	How Mastery Is Demonstrated
<b>FKSA</b>	<ul style="list-style-type: none"> <li>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)</li> <li>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)</li> </ul>	<ul style="list-style-type: none"> <li>Identify the effect of mass on the force one object exerts on another.</li> <li>Identify a change in an object’s motion due to forces using data.</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>Recognize that a larger force causes a larger change in the motion of an object.</li> </ul>	<ul style="list-style-type: none"> <li>Identify that the larger of forces will result in a larger change in the motion of the object. ..</li> </ul>

### Activity 2 Science Connector: MS-PS2-1—Motion

Through observation and demonstration, identify that when objects collide, the contact forces transfer energy and changes the objects’ motions.

Table 5. MS-PS2-1, FKSA and EU for Activity 2

Feature	Definition	How Mastery Is Demonstrated
<b>FKSA</b>	<ul style="list-style-type: none"> <li>Recognize a solution (result) to a problem involving the motion of two colliding objects.</li> </ul>	<ul style="list-style-type: none"> <li>Identify the direction one object moves following a collision.</li> <li>Predict the direction one object will move following a collision.</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>Identify that when two objects collide there is a result.</li> </ul>	<ul style="list-style-type: none"> <li>Recognize the result of a moving object hitting a stationary object.</li> <li>Recognize the result of two objects colliding that are moving in opposing directions.</li> </ul>

## Task 3: Weather and Earth’s Resources

### Activity 1 Science Connector: MS-ESS2-5—Weather

Identify how air masses influence weather using data and/or simulated demonstrations.

Table 6. MS-ESS2-5, FKSA and EU for Activity 1

Feature	Definition	How Mastery Is Demonstrated
<b>FKSA</b>	<ul style="list-style-type: none"> <li>Ability to identify how patterns of the changes and the movement of air masses in the atmosphere, determined by landforms, influence local weather patterns using models. (FKSA 2)</li> <li>Ability to identify how proximity to an ocean influences local weather patterns using models. (FKSA 3)</li> </ul>	<ul style="list-style-type: none"> <li>Identify how a change in local weather is influenced by changes in water in the atmosphere and winds.</li> <li>Identify how oceanic circulation influences local weather patterns.</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>Identify weather information used to compare weather conditions in different locations on the same day.</li> </ul>	<ul style="list-style-type: none"> <li>Recognize weather conditions.</li> <li>Compare different weather conditions in different locations on the same day.</li> </ul>

## Activity 2 Science Connector: MS-ESS3-4—Earth’s Resources

Using a variety of resources (e.g., tables, graphs, maps), identify whether changes made by humans to Earth’s natural resources have impacted natural systems.

**Table 7. MS-ESS3-4, FKSA and EU for Activity 2**

Feature	Definition	How Mastery Is Demonstrated
<b>FKSA</b>	<ul style="list-style-type: none"> <li>Ability to identify if changes that humans have made to Earth’s natural systems have positive impacts, negative impacts, or some combination of positive and negative impacts using a variety of resources.</li> </ul>	<ul style="list-style-type: none"> <li>Identify changes humans have made to Earth’s natural systems.</li> <li>Identify positive changes humans have made to Earth’s natural systems.</li> <li>Identify negative changes humans have made to Earth’s natural systems.</li> </ul>
<b>EU</b>	<ul style="list-style-type: none"> <li>Recognize the relationship between an increase in human population and an increase in the consumption of food and natural resources.</li> </ul>	<ul style="list-style-type: none"> <li>Recognize the relationship between an increase in human population and the resulting increase in food consumption.</li> <li>Recognize the relationship between an increase in human population and the resulting increase in consumption of natural resources.</li> </ul>

## Schedule Planner Template

Use the template in Table 8 to aid in scheduling testing for your student(s) based on when the related content will be taught.

**Test Examiner:** \_\_\_\_\_

**School:** \_\_\_\_\_

**Grade:** \_\_\_\_\_ **Version Assignment:** \_\_\_\_\_

**Table 8. 2018–19 CAA for Science Grade Eight Testing Planner Template**

PT	PT Name	Associated Science Connectors	Date(s) Related Instructional Content Will Be Taught	Scheduled Testing Date(s)
1	Ecosystems and Energy	<b>MS-LS2-3:</b> Ecosystems <b>MS-LS2-1:</b> Energy	Add Date(s) here:	Add Date(s) here:
2	Force and Motion	<b>MS-PS2-2:</b> Force <b>MS-PS2-1:</b> Motion	Add Date(s) here:	Add Date(s) here:
3	Weather and Earth's Resources	<b>MS-ESS2-5:</b> Weather <b>MS-ESS3-4:</b> Earth's Resources	Add Date(s) here:	Add Date(s) here: