



California Assessment of Student
Performance and Progress

California Alternate Assessment Practice Test Scoring Guide



Earth and Space Sciences Grade Eight

California Alternate Assessment for Science Practice Test Scoring Guide

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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 MS-ESS2-1 and MS-ESS3-2.

MS-ESS2-1 Earth's Systems

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

| Assessment Target | Definition | Students Will Be Able To... |
|-------------------|---|--|
| FKSA | <ul style="list-style-type: none"> 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) | <ul style="list-style-type: none"> Identify the effect of frost wedging on the breakup of rocks Identify the effect of plant roots growing in rock fissures on the breakup of rocks Identify the role of water on erosion of sediments Identify the role of wind on erosion of sediments Identify the process of forming layers of rock and soil (sediments) Identify the Sun as the driver of weathering and erosion due to its role in the water cycle and formation of wind |
| EU | <ul style="list-style-type: none"> Identify types of Earth materials that can be located at the surface (exterior) and/or in the interior. | <ul style="list-style-type: none"> Identify common materials used by humans that are found on or in the crust of Earth |

MS-ESS3-2 Earth and Human Activity

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

| Assessment Target | Definition | Students Will Be Able To... |
|-------------------|--|--|
| FKSA | <ul style="list-style-type: none"> 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. (FKSA 1) | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> Recognize that some natural hazards (e.g., volcanic eruptions, severe weather) can be predicted while others are not predictable. | <ul style="list-style-type: none"> Recognize examples of natural hazards that can be predicted Recognize examples of natural hazards that cannot be predicted |

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—Grade 8 Earth and Space Sciences](#).

Example of Item Metadata

| Item | Key | Science Connector | Assessment Target |
|------|----------------|-------------------|---|
| 1 | A (1 point) | MS-ESS2-1 | EU: Identify types of Earth materials that can be located at the surface (exterior) and/or in the interior. |

Grade Eight Earth and Space Sciences Practice Test Items

| Item | Key | Science Connector | Assessment Target |
|------|--|-------------------|---|
| 1 | A (1 point) | MS-ESS2-1 | EU: Identify types of Earth materials that can be located at the surface (exterior) and/or in the interior. |
| 2 | B (1 point) | MS-ESS2-1 | EU: Identify types of Earth materials that can be located at the surface (exterior) and/or in the interior. |
| 3 | A (1 point) | MS-ESS2-1 | FKSA 1: 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. |
| 4 | B (1 point) | MS-ESS2-1 | FKSA 1: 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. |
| 5 | Part A: A (1 point) Part B: A (1 point) | MS-ESS2-1 | FKSA 1: 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. |
| 6 | A (1 point) | MS-ESS3-2 | EU: Recognize that some natural hazards (e.g., volcanic eruptions, severe weather) can be predicted while others are not predictable. |
| 7 | A (1 point) | MS-ESS3-2 | EU: Recognize that some natural hazards (e.g., volcanic eruptions, severe weather) can be predicted while others are not predictable. |
| 8 | C (1 point) | MS-ESS3-2 | FKSA 1: 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. |

Item metadata table continuation showing items 9–10

| Item | Key | Science Connector | Assessment Target |
|------|--|-------------------|---|
| 9 | B (1 point) | MS-ESS3-2 | FKSA 1: 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. |
| 10 | Part A: C (1 point) Part B: C (1 point) | MS-ESS3-2 | FKSA 1: 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. |