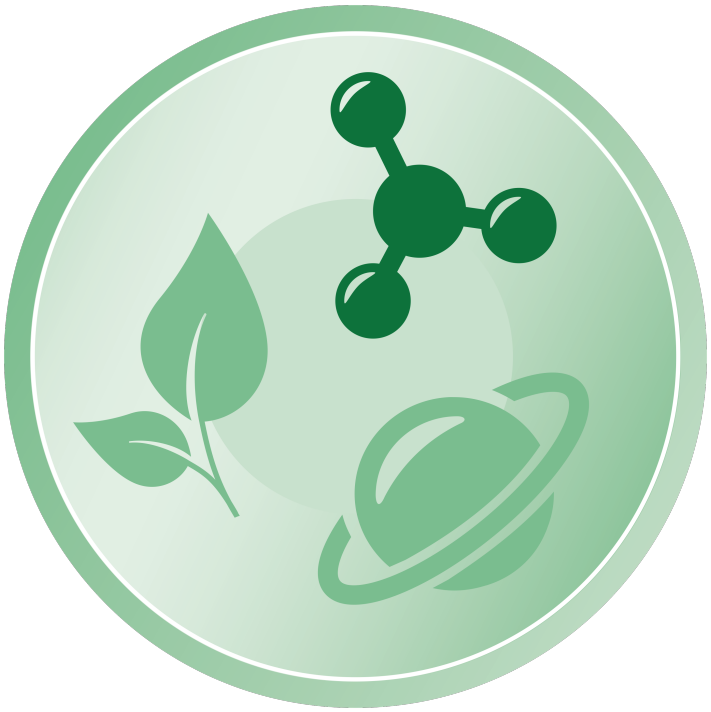
California Alternate Assessment

California Assessment of Student Performance and Progress

Practice Test Scoring Guide



Physical Sciences Grade Eight

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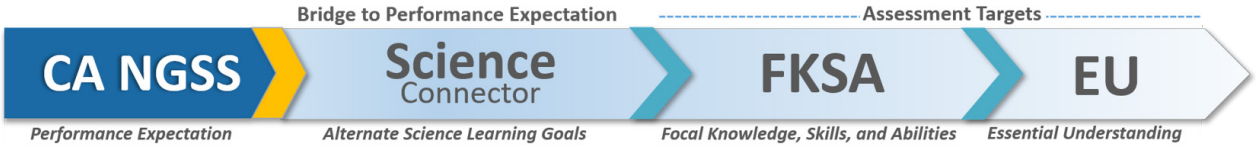
Assessed Standards

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 (that is, 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.



Practice Test Scoring Guide (cont.)

This practice test is intended to assess Science Connectors MS-PS1-6, MS-PS4-2, and MS-PS2-2.

MS-PS1-6 Matter and its Interactions

Identify or modify a device in which a chemical process releases or absorbs thermal energy.

Table 1. MS-PS1-6, FKSA and EU

Assessment Target	Definition	Students Will Be Able To…
FKSA	• Ability to identify or modify a device in which a chemical reaction releases thermal energy. (FKSA 1) • Ability to identify or modify a device in which a chemical reaction absorbs thermal energy. (FKSA 2)	• Identify a device that uses a chemical reaction to release thermal energy • Identify a device that uses a chemical reaction to absorb thermal energy • Identify a change in temperature as evidence that a device is releasing or absorbing thermal energy • Identify how to change the amount of thermal energy a device releases or absorbs
EU	• Identify examples of chemical reactions that release energy (e.g., heat, light).	• Identify an example of a chemical reaction that releases heat or light

Practice Test Scoring Guide (cont.)

MS-PS4-2 Waves and Their Applications in Technologies for Information Transfer

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 2. MS-PS4-2, FKSA and EU

Assessment Target	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 shiny), 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) • Recognize when light changes from one color to another

Practice Test Scoring Guide (cont.)

MS-PS2-2 Motion and Stability: Forces and Interactions

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 3. MS-PS2-2, FKSA and EU

Assessment Target	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 • Use a data table to analyze which force will most affect the motion of objects of equal masses
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

Practice Test Scoring Guide (cont.)

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. 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.

Scoring guides should be used alongside the online practice tests, which can be accessed at the Practice and Training Tests web page.

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 *CAA for Science: Practice Test DFA—Physical Sciences, Grade Eight*.

Grade Eight Physical Sciences Practice Test Items

Item	Key	Science Connector	Assessment Target
1	A (1 point)	MS-PS1-6	EU: Identify examples of chemical reactions that release energy (e.g., heat, light).
2	B (1 point)	MS-PS1-6	FKSA 1: Ability to identify or modify a device in which a chemical process releases thermal energy.
3	B (1 point)	MS-PS1-6	FKSA 2: Ability to identify or modify a device in which a chemical process absorbs thermal energy.
4	B (1 point)	MS-PS1-6	EU: Identify examples of chemical reactions that release energy (e.g., heat, light).
5	**Part A:** B (1 point) **Part B:** B (1 point)	MS-PS1-6	FKSA 1: Ability to identify or modify a device in which a chemical process releases thermal energy.
6	B (1 point)	MS-PS4-2	EU: Recognize that light can have different brightness and color.
7	A (1 point)	MS-PS4-2	EU: Recognize that light can have different brightness and color.
8	C (1 point)	MS-PS4-2	FKSA 2: Ability to identify how sound waves are reflected, absorbed, or transmitted through various materials (e.g., water, air, glass) by using a model.
9	B (1 point)	MS-PS4-2	FKSA 1: Ability to identify how light waves are reflected, absorbed, or transmitted through various materials (e.g., water, air, glass) by using a model.
10	brick wall book (2 points) Both correct responses (1 point) One correct response	MS-PS4-2	FKSA 1: Ability to identify how light waves are reflected, absorbed, or transmitted through various materials (e.g., water, air, glass) by using a model.
11	A (1 point)	MS-PS2-2	EU: Recognize that a larger force causes a larger change in the motion of an object.
12	A (1 point)	MS-PS2-2	EU: Recognize that a larger force causes a larger change in the motion of an object.

Item	Key	Science Connector	Assessment Target
13	B (1 point)	MS-PS2-2	EU: Recognize that a larger force causes a larger change in the motion of an object.
14	B (1 point)	MS-PS2-2	EU: Recognize that a larger force causes a larger change in the motion of an object.
15	Hit the ball hard. Hit the ball with a heavy bat. (2 points) Both correct responses (1 point) One correct response	MS-PS2-2	FKSA 2: 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.