



CALIFORNIA ASSESSMENT OF STUDENT PERFORMANCE AND PROGRESS

California Alternate Assessment for Science Practice Items Scoring Guide *for* Grade Eight



Physical Sciences— Thermal Energy



California Assessment of
Student Performance and Progress

California Alternate Assessment for Science Practice Test Scoring Guide

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Assessed Standards

The CAA for Science measures the Science Core Content 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 Core Content 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; and at the simplest level the essential understandings (EU) are the basic scientific concepts that students should understand. This is presented as a continuum in the figure below.



In this practice test the following connector will be assessed:

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	<ul style="list-style-type: none">• Ability to identify or modify a device in which a chemical process releases thermal energy. (FKSA 1)• Ability to identify or modify a device in which a chemical process absorbs thermal energy. (FKSA 2)	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Identify examples of chemical reactions that release energy (e.g., heat, light).	<ul style="list-style-type: none">• Identify an example of a chemical reaction that releases heat or light

Introduction to Practice Test Scoring Guide

The California Alternate Assessment for Science Practice Test Scoring Guide provides details about the items, assessment targets, correct responses, and related scoring considerations for the California Alternate Assessment 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.
- 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 guide presents the following information for each item:

- Assessment Target: FKSA or EU being assessed
- Static presentation of the item: static presentation of item from test administration system
- Static presentation of student response field(s): static presentation of response field from test administration system
- Answer key or exemplar: expected student response or example response from score point value
- Rubric and applicable score points for items where appropriate: score point representations for student responses

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 an Orienting Activity that is nongraded before each set of items. Please be sure to complete the Orienting Activity for each connector with 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 Physical Sciences](#).

Grade Eight Practice Test Items

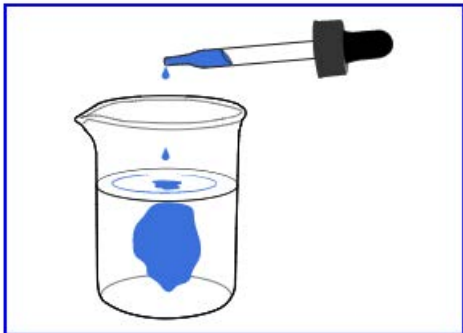
Item	Assessment Target
1	EU: Identify examples of chemical reactions that release energy (e.g., heat, light).

Show me the reaction giving off light.

(A)



(B)



Key: A (1 point)

Item	Assessment Target
2	FKSA 1: Ability to identify or modify a device in which a chemical process releases thermal energy.

Show me what makes heat.

(A)



ice

(B)

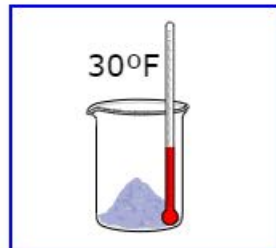
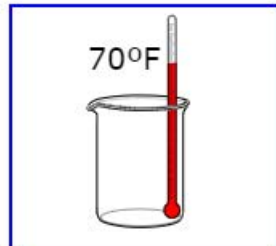


stove

Key: B (1 point)

Grade Eight Practice Test Items

Item	Assessment Target
3	FKSA 2: Ability to identify or modify a device in which a chemical process absorbs thermal energy.



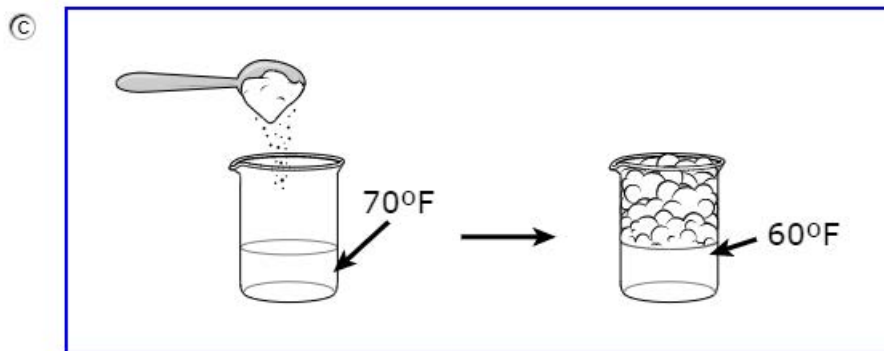
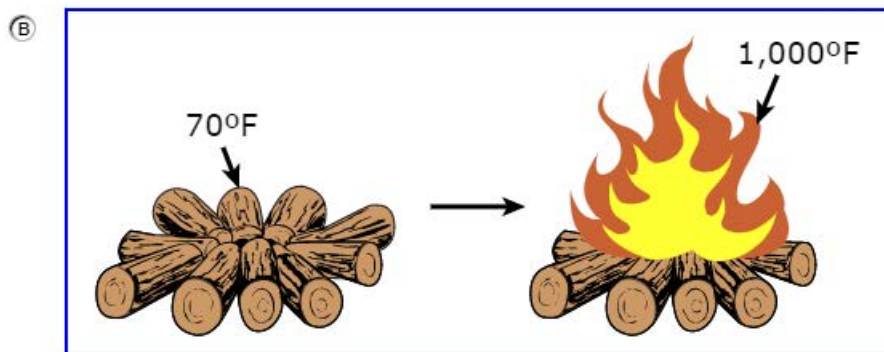
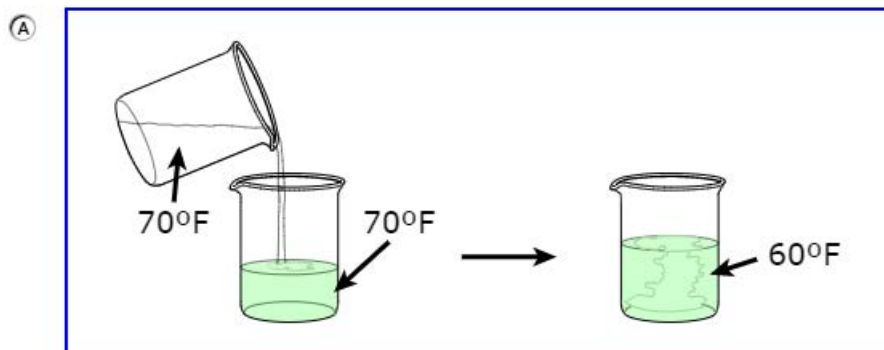
How did the powders change?

- Ⓐ They got hotter.
- Ⓑ They got colder.
- Ⓒ They stayed the same.

Key: B (1 point)

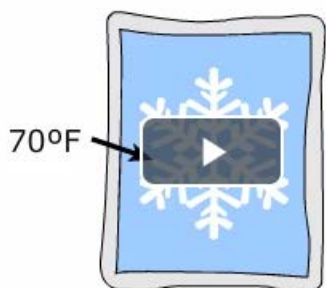
Item	Assessment Target
4	EU: Identify examples of chemical reactions that release energy (e.g., heat, light).

Show me a reaction giving off heat.



Key: B (1 point)

Item	Assessment Target
5	FKSA 1: Ability to identify or modify a device in which a chemical process releases thermal energy.



Part A

How did the temperature change when the materials were mixed?

- Ⓐ It went up.
- Ⓑ It went down.

Part B

What happened to cause the temperature to change?

- Ⓐ The pack was put in the freezer.
- Ⓑ There was a chemical reaction.

Key:

Part A: B (1 point)

Part B: B (1 point)

Rubric:

(2 points) The student selects the correct responses in both Part A and Part B.

(1 point) The student selects the correct response in either Part A or Part B, but not both.