



CALIFORNIA ASSESSMENT OF STUDENT PERFORMANCE AND PROGRESS

California Alternate Assessment for Science Practice Items Scoring Guide *for* High School



Physical Sciences— Equilibrium



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:

HS-PS3-4 Energy

Identify that the temperature of two different components, when combined, show uniform energy distribution.

Table 1. HS-PS3-4, FKSA and EU

Assessment Target	Definition	Students Will Be Able To...
FKSA	<ul style="list-style-type: none">Recognize that the mixture of two different components shows uniform energy distribution. (FKSA 1)	<ul style="list-style-type: none">Recognize the combination of two substances with different temperatures will result in a final temperature between that of the two substancesRecognize the combination of two substances with different energy levels will result in a uniform final energy distribution because one substance loses heat energy and the other gains heat energy
EU	<ul style="list-style-type: none">Recognize components change their temperature when combined.	<ul style="list-style-type: none">Recognize the temperature of a warmer substance will decrease when a cooler substance is addedRecognize the temperature of a cooler substance will increase when a warmer substance is added

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.

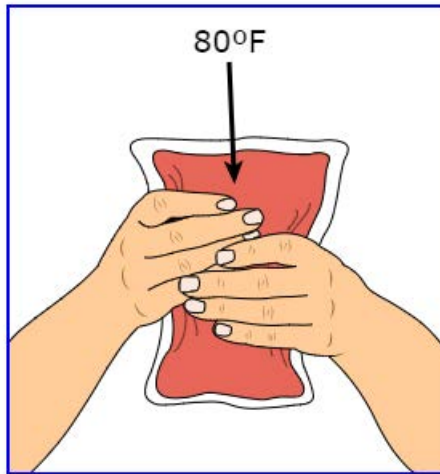
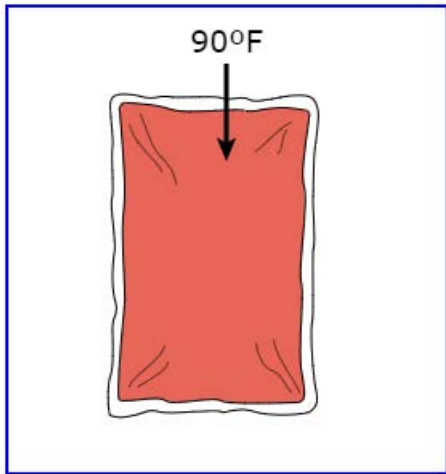
This guide presents the following information for each item:

- 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—High School Physical Sciences](#).

High School Practice Test Items

Item	Assessment Target
2	EU: Recognize components change their temperature when combined.

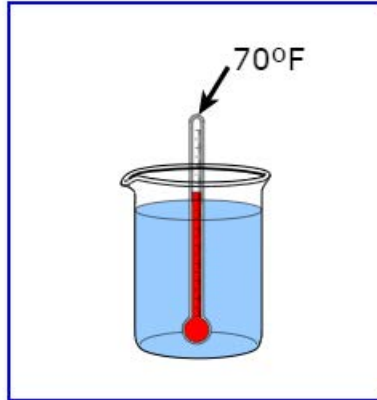
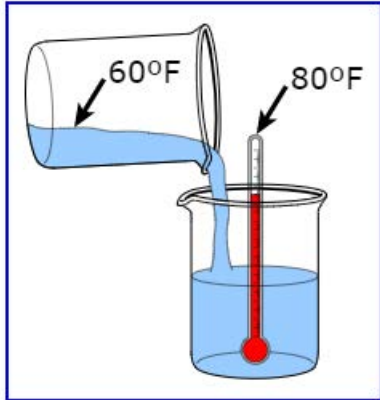


How did the hot pack change after it was in cold hands?

- Ⓐ The hot pack got colder.
- Ⓑ The hot pack got warmer.

Key: A (1 point)

Item	Assessment Target
3	EU: Recognize components change their temperature when combined.



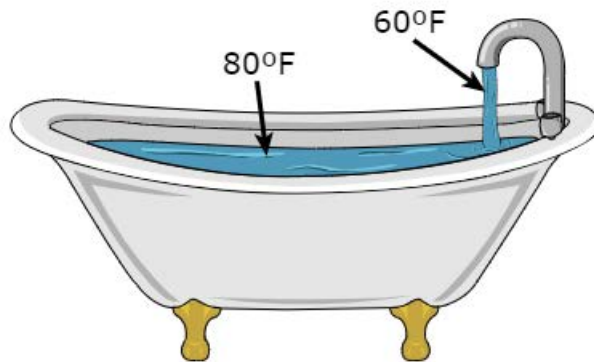
What happened when the liquids were mixed together?

- Ⓐ The temperature stayed the same.
- Ⓑ The temperature changed.

Key: B (1 point)

High School Practice Test Items

Item	Assessment Target
4	FKSA 1: Recognize that the mixture of two different components shows uniform energy distribution.

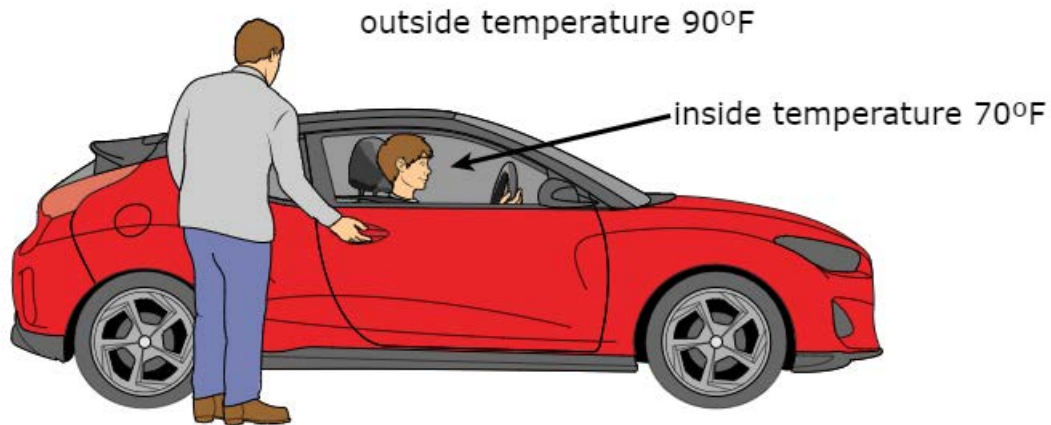


What will happen to the temperature of the water in the bathtub after the new water from the faucet is added?

- Ⓐ It will be lower than 60 degrees.
- Ⓑ It will be higher than 80 degrees.
- Ⓒ It will be in between 60 and 80 degrees.

Key: C (1 point)

Item	Assessment Target
5	FKSA 1: Recognize that the mixture of two different components shows uniform energy distribution.

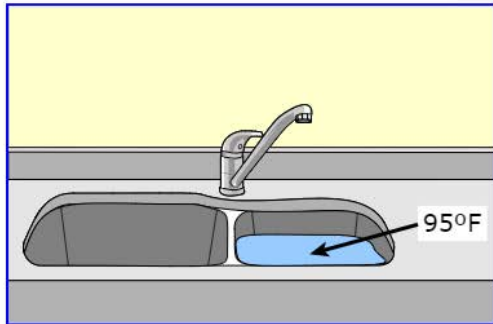


When the person gets in the car, some of the hot air from outside goes into the car. How will the temperature in the car change?

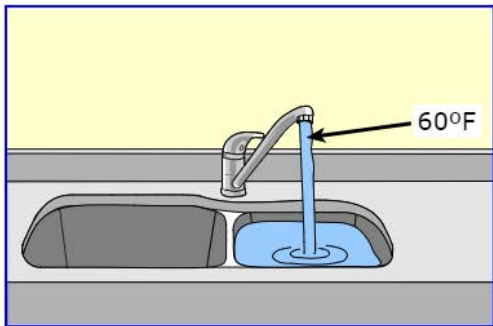
- (A) It will get cooler.
- (B) It will get warmer.
- (C) It will stay the same.

Key: B (1 point)

Item	Assessment Target
6	FKSA 1: Recognize that the mixture of two different components shows uniform energy distribution.



before



after

Part A

How did the temperature change when water was added?

- (A) It became cooler.
- (B) It became warmer.

Part B

What happened to the thermal energy of the hot water?

- (A) The thermal energy went up.
- (B) The thermal energy went down.

Key:

Part A: A (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.