



# ASPECT

Assessing Students' Progress on the Energy Concept

## Context: Item code (MC) & Item code (CR)

Grade Band – Energy Theme

### TASK OVERVIEW

This paragraph is a short summary of the task including a description of the phenomenon on which the task focuses and of what students do and think about as they make sense of the phenomenon.

### TARGETED DCIs, SEPs, AND CCCs

#### Disciplinary core ideas

- DCI Code: text of the DCI with parts that are not addressed by the task in gray

#### Science & engineering practices

- SEP Code: text of the SEP with parts that are not addressed by the task in gray

#### Crosscutting concepts

- CCC Code: text of the CCC with parts that are not addressed by the task in gray

#### Related Performance Expectations

- PE Code: text of the whole PE with clarification statements and assessment boundaries

## TASK PERFORMANCE EXPECTATION

Statements that combine the DCIs, SEPs, and CCCs listed above into learning performances that summarize the goal of the task. SEP parts of the statements are *italicized*, and crosscutting concepts are underlined.

## LINK TO ONLINE VERSION

This is a link to the online version of the task which shows the task as students would see it. For tasks with multiple-choice and constructed-response versions, this link will have both versions available.

### Task

This section includes the entire task with images and links to videos. If an item has both multiple-choice and constructed-response versions, both versions will be listed.

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### Alignment to Targeted DCIs, SEPs, and CCCs and Scoring Rubrics

### QUESTION #

A copy of the question appears here.

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## LEARNING GOAL

### Learning Performance

- The learning performance is a statement that describes what the student is expected to do when responding to the question.

## Targeted DCIs, SEP, and CCC

- This section makes explicit which parts of the DCIs, SEPs, and CCCs are targeted by the question. Parts that are grayed out are not addressed by the question.

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## SCORING RUBRIC

### Ideal Response

This is sample of what we would ideally like students to write as a response to the question.

### Elements of a Correct Response

This is a table that explicitly teases apart the ideal response into finer grain-size statements that we call the “elements” of an ideal response. Each element is a column in the scoring spreadsheet of student responses and each response is rated dichotomously on each element.

For questions that involve the practice of scientific explanation, the elements typically cluster into the following categories: claim, evidence, science ideas, and reasoning. For questions that involve the practice of modeling, the elements typically cluster into the following categories: including relevant components, the interactions among the components, and science ideas. The score on the question is based on how many of these categories the student covers in their response.

For some questions, we have identified a list of productive ideas. These productive ideas are related science ideas to the science ideas being targeted but may be at a lower grade band. No points were awarded for these ideas, but they were noted because they indicate ideas that can be built upon during instruction.

Categories	Elements
This column lists the categories of the rubric (e.g., making a claim, using science ideas...).	This column includes bulleted lists of the elements that comprise the ideal response. If more than one element is listed in a category, the

## Sample Student Responses

This table displays a range of sample student responses along with the score the response received and an explanation of the score.

Student response	Scoring description
This column lists sample responses from students who participated in our field test.	This column presents the score that the response received and a description that explains why the response received that score.

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