Grade 8 Science
Short Constructed Response Scoring Guide

General Information

Beginning with the 2022–2023 school year, science assessments will include a short-constructed response at every assessed grade level. Students will be asked to provide a short response to a question. Responses will be scored using a prompt-specific two-point rubric.

This State of Texas Assessments of Academic Readiness (STAAR®) constructed response scoring guide provides student exemplars at all score points for a short-constructed response question from the STAAR grade 8 science stand-alone field test. The question is presented as it appeared on the field test, and responses were scored based on the two-point rubric that was developed with the input of Texas educators. A response earns a specific score point based on the completeness of the response provided as measured against the rubric.

The responses in this guide are actual student responses submitted online during the testing window. To protect the privacy of individual students, all names and other references of a personal nature have been altered or removed. Otherwise, the responses appear as the students wrote them and have not been modified.
Grade 8 Science Prompt

**Prompt:** The satellite image shows the largest glacier in Alaska. The dark areas indicated by arrows are moraines, which are composed of many large and small rocks and contain dirt and silt.

How are the moraines formed AND why are there several moraines?

Look at the image carefully. Then enter your answer in the box provided.

**Item-Specific Rubric**

**Score: 2**

The student responds that the moraines formed when the glacier advanced and carried eroded materials along the bottom and edges of the advancing glacier, AND there are several moraines due to the movement of different layers at different times.

**Score: 1**

The response provides only half of the correct details.

**Score: 0**

The response is incorrect or irrelevant.
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Sample Student Responses

Score Point 0s

| u think that Moraines when the glacier explodes a lot of dirt goes into the glacier. And why there’s so many of them is becuase dirt and silt that breaks throught the whole glacier. |

**Score Point 0**

No accurate description for how moraines form is given (when the glacier explodes a lot of dirt goes into the glacier) and the explanation of why there are multiple moraines is too vague to demonstrate a partial understanding (because dirt and silt that breaks through the whole glacier). While the explanation addresses dirt and silt, no attempt is made to connect that to the formation of multiple moraines.

| Moraines are formed by ice and water and there is also because its super cold and because theirs a lot off water there. |

**Score Point 0**

An incorrect description of how moraines form is given (are formed by ice and water) and no correct explanation is given to explain why there are several moraines (because its super cold and because theirs a lot off water there).

| I think they are formed when two different colored liquids are combined or when two different liquids meet. |

**Score Point 0**

The description given is entirely incorrect and irrelevant (formed when two different colored liquids are combined [combined] or when two different liquids meet).

Score Point 1s

| I’d say that the glacier has passed through some land masses which evidently destroys a part of the land masses. The dirt rocks and silt are just remnants of the eroded areas. |

**Score Point 1**

This student correctly describes how moraines are formed (glacier has passed through some land masses... destroys a part of the land masses... the dirt rocks and silt are just remnants of the eroded areas), but no attempt is made to explain why there are multiple moraines. The student demonstrates a partial understanding of the stimulus material.

| The moraines are formed from the movement of the glacier, which weathers down surrounding rock and takes it along with it. |
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Score Point 1

This student correctly describes how moraines are formed (formed from the movement of the glacier, which weathers down surrounding rock and takes it along with it). However, they did not address the second part of the prompt, so the student does not demonstrate more than a partial understanding of the stimulus material.

The moraines are formed by consist weathering and erosion from the movement of the glacier. There are several moraines because of the gigantic size of the glacier.

Score Point 1

This student identifies how moraines are formed (consist weathering and erosion from the movement of the glacier) but does not address the products of the weathering and erosion, such as rocks and sediment, and therefore is too general of a description to demonstrate more than a partial understanding. The attempt to explain why there are multiple moraines is vague (because of the gigantic size of the glacier). The student does not explain how the size of the glacier would lead to several moraines.

Score Point 2

Moraines are formed by the glacier picking up dirt and soil and dropping them off somewhere else. There are multiple moraines because this may have happened multiple times.

Score Point 2

This student correctly describes how moraines are formed (by the glacier picking up dirt and soil and dropping them off somewhere else) and explains why there are multiple moraines (because this may have happened multiple times). The student demonstrates a complete understanding of the stimulus material.

My infrence is that the glacier has pushed aside the dirt, rocks, and silt to make all of these moraines. I think that there are many moraines because The glacier pushed the amounts of rocks and silt at different times.

Score Point 2

This student correctly describes how moraines are formed (the glacier has pushed aside the dirt, rocks, and silt to make all of these moraines) and explains why there are multiple moraines (The glacier pushed the amounts of rocks and silt at different times). The student demonstrates a complete understanding of the stimulus material.

Moraines are formed when glaciers pass through and built up sediments. The reson there are several moraines might be because there could have been previous moraines built up from a previous glacier going through before.
Score Point 2

This student correctly describes how the moraines are formed (when glaciers pass through and built up sediments) and explains why there are multiple moraines (could have been previous moraines built up from a previous glacier going through before). Although the formation of the moraines lacks some details, the student demonstrates a complete understanding of the stimulus material.