



Accompanying Guide to New Question Type Samplers: Science

This document provides a guide to navigating the new question type samplers, including scoring and reporting information

All example questions in this guide are from the new question type samplers, which are available here: [new question type samplers](#)

Information provided in this document is subject to change following results from the Spring 2022 field test.

Please note the following about the new question type samplers:

- Sampler results are not predictive of student performance on the STAAR assessment, and instructional interpretations should not be made from the question type sampler results.
- Constructed response questions in the samplers will not be scored because they are handscored.
- Not all new question types in the samplers will appear on every STAAR test every year.

Additional information and resources about the STAAR assessment are available here: [STAAR Test](#)

Any new question type will need to be able to meet our existing rigorous requirements for STAAR questions AND provide additional benefits

New questions will need to meet our existing rigorous requirements for STAAR, including:

- f* Valid statistics from field tests
- f* Alignment with TEKS
- f* Grade-level appropriateness
- f* Lack of bias
- f* Accessibility for all students
- f* Review and approval from a group of Texas educators who teach the grade level and agree students should be able to answer these questions at the end of the year

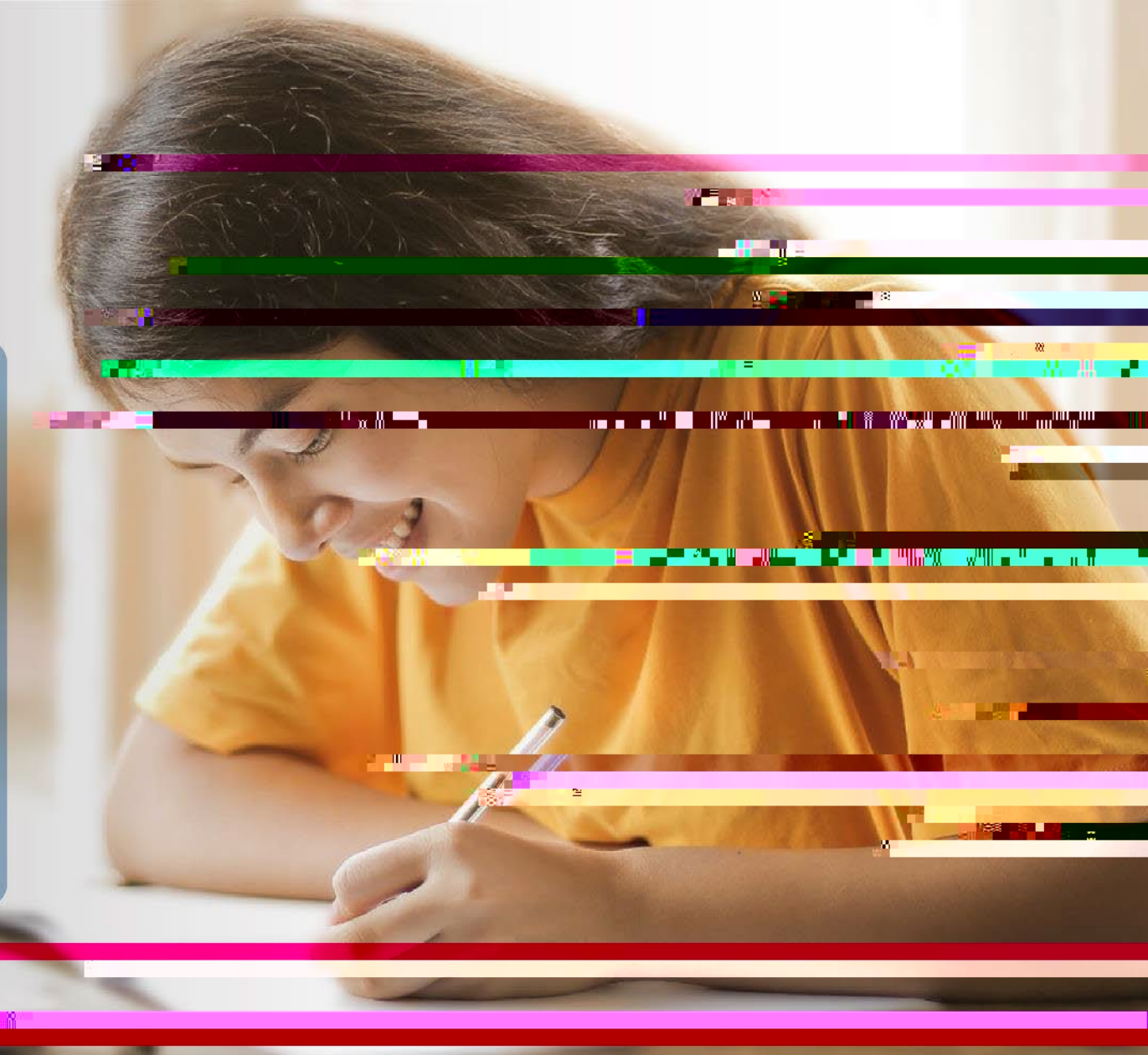
TEA has worked closely with educators to determine which new question types best support students:

- f* 600 educators participated in focus groups on new question types
- f* 92% of educators agree that the new question types allow students to better demonstrate their knowledge
- f* 89% of educators believe that the new question types are more engaging for students
- f* 80%+ of educators agree that new question types will impact instructional planning

The following new question types may be included in the specified Science tests starting in Spring 2023

*Question Type	Question Type Description	STAAR Science Test Titles
Text entry	Student responds by typing a brief string of text such as a number, word, or phrase.	Grade 8 EOC
Hot spot	Student responds by selecting one or more specific areas of a graphic.	Grades 5, 8 EOC
Drag and drop	Student evaluates a given number of options (words, numbers, symbols, etc.) and chooses which response(s) to drag to a given area (a diagram, map, chart, etc.).	Grades 5, 8 EOC
Multipart	Student responds to a twoGrades 5, 8 EOC	

Scoring and Reporting Information for Each New Question Type



Overview of the scoring and reporting guide

The remainder of this resource includes information about scoring and reporting for each new question type on science tests.

The first slide for each new question type is an overview that includes a definition, the possible points for the question type, and the grades which may include the question type.

Then, one example of the new question type is given. The example includes a set of slides:

- Student view slides: Student view that includes the question prompt and what the student will see when they select their answer. Example student responses for each possible credit will also be given.
- Teacher view slide: Teacher view in the reporting system that includes the scoring model for the question type, the correct answer to the example question, and the score of the student answering the example question.

Question Type: Text Entry

Example #1: Student view

This example is question #1 in the Biology EOC sampler.

Question Type: Text Entry

Example #1: Student view

This is what the student will see when they enter the correct answer (1 point).

Which transport tissue allows water to travel upward from the roots to the leaves?

Enter your answer in the box.

xylem

This student entered the incorrect answer in the space (0 points).

Which transport tissue allows water to travel upward from the roots to the leaves?

Enter your answer in the box.

Question Type: Text Entry

Example #1: Teacher vi

Question Type: Hot Spot

Question Type Overview

Description: Student responds by selecting one or more specific areas of a graphic.

Point value: These questions can be worth a maximum of 2 points with the possibility of receiving 1 point for a partially correct response.

Science tests that may include these questions: Grade 5, Spanish Grade 5, Grade 8, and EOC

Question Type: Hot Spot

Example #1: Student view

This example is question #4 in the Grade 5 sampler.

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Which examples in the image demonstrate inherited traits?

Select **TWO** correct answers.

A horse pulling a wagon

A dog walking on a leash

A farmer driving a tractor

A student reading a book

A chicken clucking

A mouse blending with the ground

This is what the student will see when they select the correct answers (2 points).

Select **TWO** correct answers.

A horse pulling a wagon

A dog walking on a leash

A farmer driving a tractor

A student reading a book

A chicken clucking

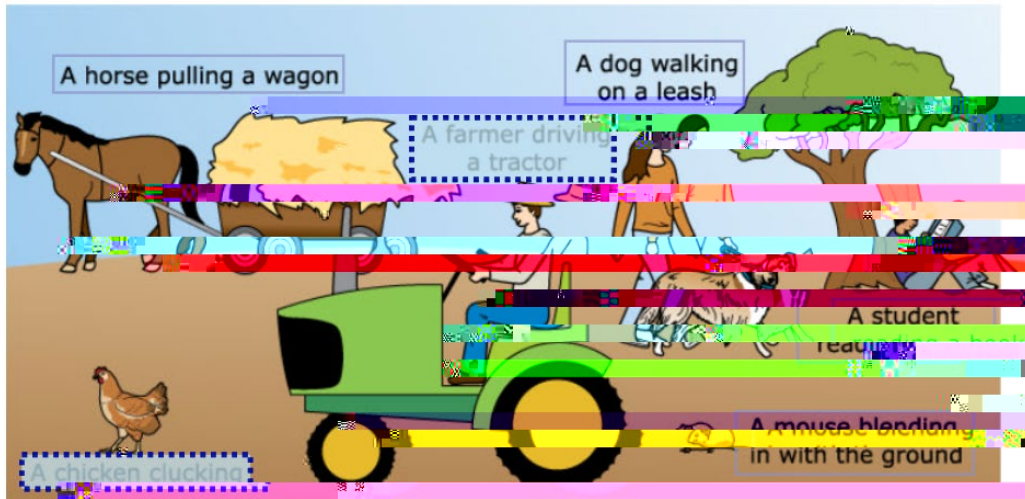
A mouse blending with the ground

Question Type: Hot Spot

Example #1: Student view

This student chose one correct answer and one incorrect answer (1 point).

Select **TWO** correct answers.



This student did not choose the correct answers (0 points).

Select **TWO** correct answers.



Question Type: Hot Spot

Example #1: Teacher view

CRS - Centralized Reporting

Fall 2022 STAAR Interim

Current Item: 4 Score: 2/2

Scoring Assertion	Outcome
1. The student chose the correct answer.	✓

student setting(s)
ON

4

Which examples in the image demonstrate inherited traits?
Select TWO correct answers.

A horse pulling a wagon

A dog walking on a leash

a tractor

A student reading a book

A mouse blending in with the ground

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The scoring model for this hot spot question is:

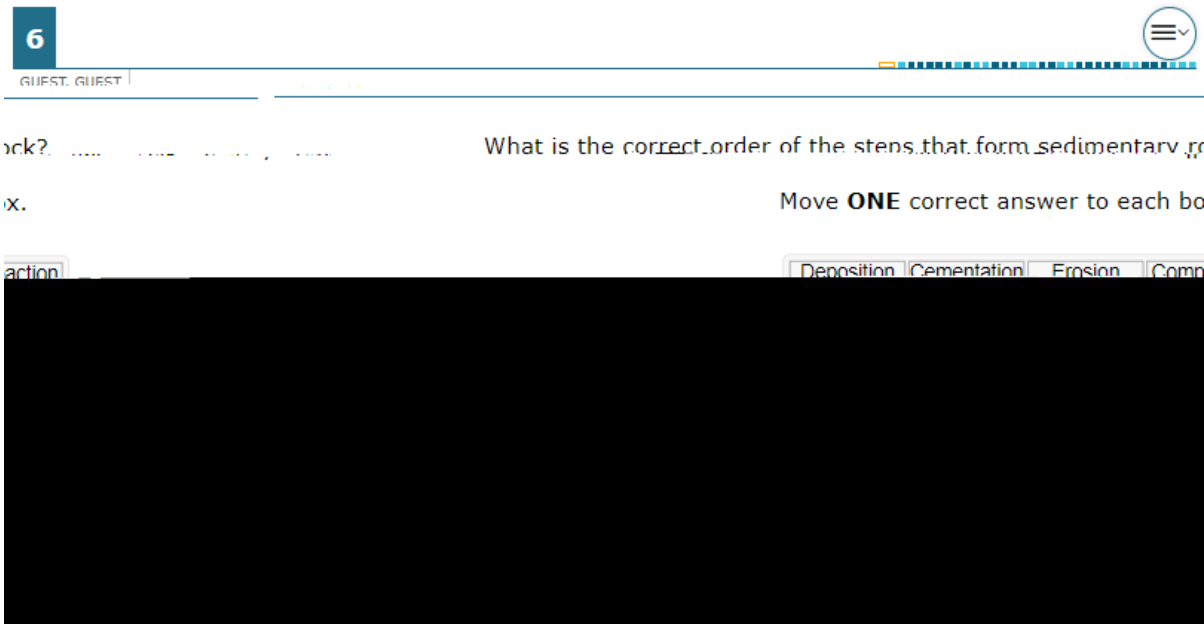
- To obtain full credit (2 points), the student will correctly select two examples in the image that demonstrate inherited traits.
- To obtain partial credit (1 point), the student will correctly select one example.
- Students will receive 0 points if both selections are missing or incorrect.

In this example, the student chose the correct answer, so they received full credit (2 points).

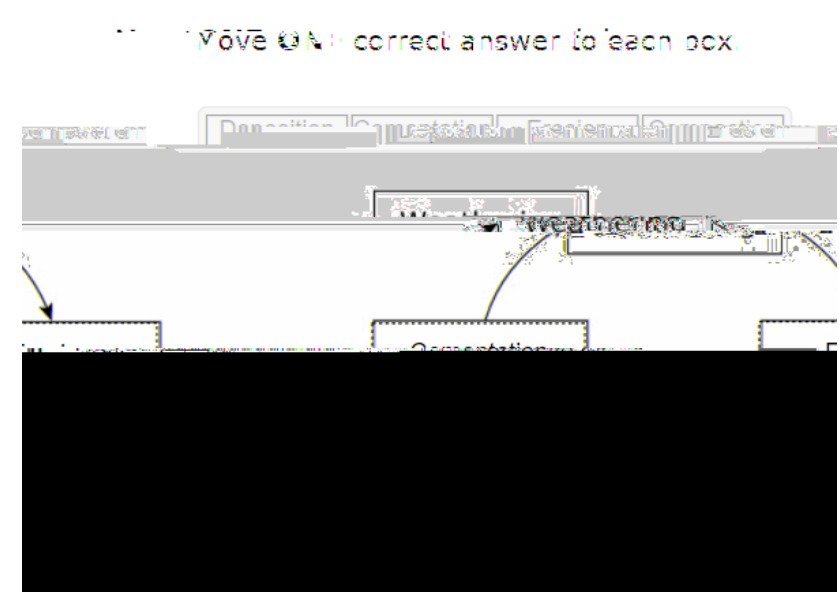
Question Type: Drag and Drop

Example #1: Student view

This example is question #6 in the Grade 5 sampler.



This is what the student will see when they select the correct answers (2 points).



Question Type: Drag and Drop

Example #1: Student view

Question Type: Multipart Question Type Overview

Description: Student responds to a two-part question where Parts A and B are scored separately. In many cases, Part B asks students to give evidence or explain their thinking for their answer to Part A.

Point value: These questions can be worth a maximum of 2 points with the possibility of receiving 1 point for a partially correct response.

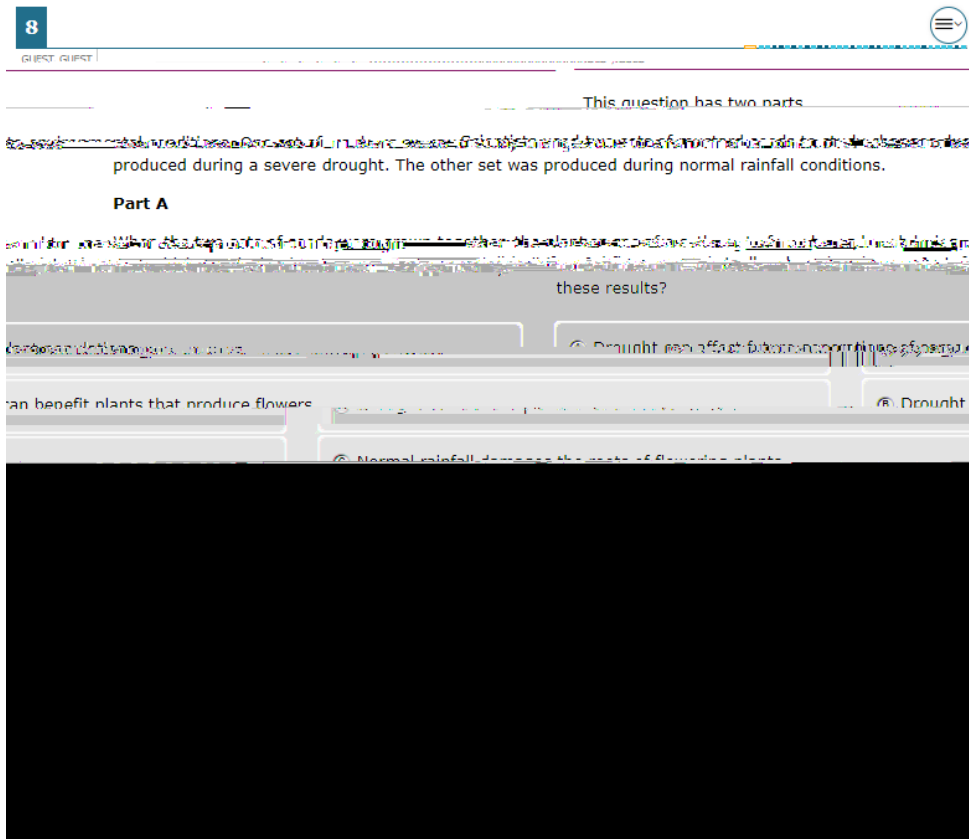
Science tests that may include these questions: Grade 5, Spanish Grade 5, Grade 8, and EOC

Question Type: Multipart

Example #1: Student view

This example is question #8 in the Grade 8 sampler.

This is what the student will see when they select the correct answers (2 points).



Question Type: Multipart Example #1: Student view

This student selected the correct answer in Part A and an incorrect answer in Part B (1 point).

This student selected an incorrect answer for Part A (0 points).

Question Type: Multipart

Example #1: Teacher view

CRS - Centralized Reporting

Fall STAAR Interim

Item: 7 Student: John188, Doe038 Item 8

Current Item: 8 Item & Score Rubric & Scores

Scoring	Outcome
1. The student chose the correct answer.	✓

student setting(s)
ON

8
Jennifer Stittmeyer

This question has

Scientists used two sets of mustard seeds to study changes due to environmental conditions. One set of seeds was produced during a severe drought. The other set was produced during normal rainfall.

Part A

When the two sets of seeds were grown together, the plants grown from the set of seeds produced during drought conditions formed flowers much earlier than the plants grown from the other set. Which conclusion is supported by these results?

- A Drought can affect future generations of some plant populations.
- B Drought can benefit plants that produce flowers.
- C Drought can affect the genetic makeup of some plant populations.
- D Normal rainfall reduces reproduction of some plant populations.

Part B

Which statement supports the answer to Part A?

- A Plants can reproduce under unfavorable environmental conditions.
- B Plants produce flowers only when environmental conditions are favorable.
- C Plants with genes for producing flowers early are favored by the environment.
- D Plants maintain reproductive cycles regardless of environmental conditions.

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The scoring model for this multipart question is:

- To obtain full credit (2 points), the student will correctly answer Parts A and B.
- To obtain partial credit (1 point), the student will correctly answer Part A.
- Students will receive 0 points if the answer to Part A is missing or incorrect.

Question Type: Multiselect

Question Type Overview

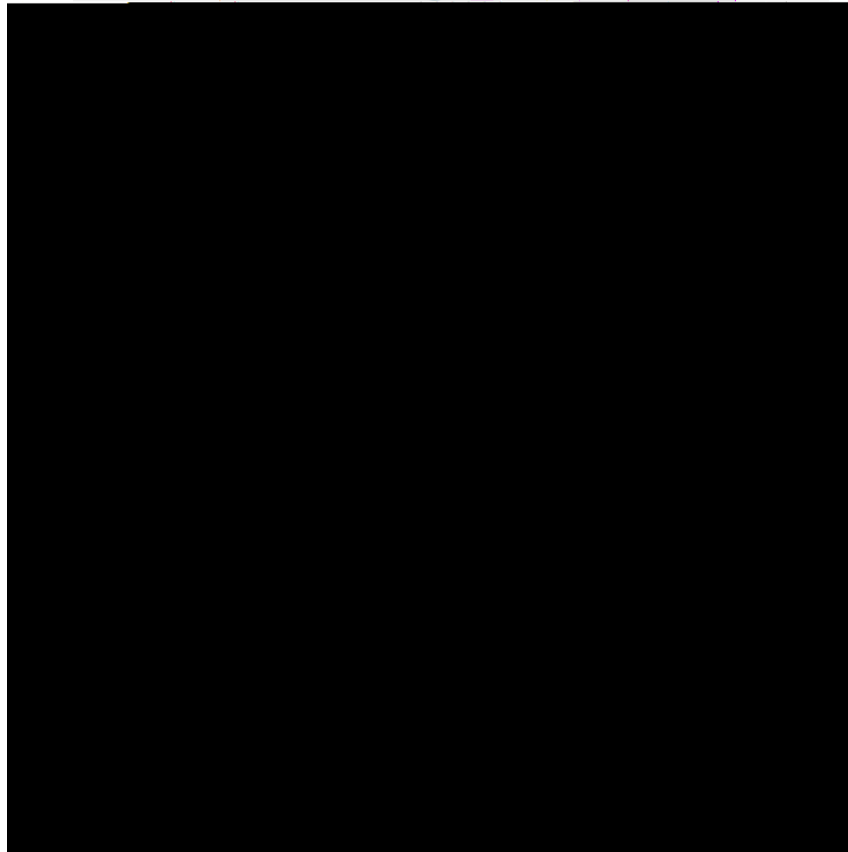
Description: Student can select more than one correct answer from a set of possible answers. Student will not be allowed to select more than the specified number of correct answers asked for within an individual question.

Point value: These questions can be worth a maximum of 2 points with the possibility of receiving 1 point for a partially correct response.

Science tests that may include these questions: Grade 5, Spanish Grade 5, Grade 8, and EOC

Question Type: Multiselect Example #1: Student view

This example is question #9 in the Biology EOC sampler.



This is what the student will see when they select the correct answers (2 points).

Question Type: Multiselect

Example #1: Student view

The student selected one correct answer and one incorrect answer (1 point).

The student did not select the correct answers (0 points).

Question Type: Multiselect

Example #1: Teacher view

The screenshot displays a teacher view of a multiselect question in a reporting system. At the top, a 'Scoring Assertion' table shows the question's status. Below this, the question text reads: 'Two single-celled organisms are shown.' Two diagrams are provided: Organism Y, a eukaryotic cell with a nucleus, vacuole, chloroplast, cytoplasm, and flagellum; and Organism Z, a prokaryotic cell with a cell membrane, genetic material, cytoplasm, and flagellum. The question asks the student to select two correct statements comparing the organisms. The available options are:

- Organism Y is a eukaryotic cell, while Organism Z is a prokaryotic cell.
- Organism Z has a complex structure, while Organism Y has a simple structure.
- Organism Y requires a host cell to reproduce, while Organism Z does not.
- Organism Z contains genetic material, while Organism Y does not.
- Organism Y contains membrane-bound organelles, while Organism Z does not.

The scoring model for this multiselect question is:

- To obtain full credit (2 points), the student will correctly select two statements that accurately compare the two organisms.
- To obtain partial credit (1 point), the student will correctly select one statement.
- Students will receive 0 points if both selections are missing or incorrect.

Question Type: Short Constructed Response

Question Type Overview

Description: Student gives a brief explanation in their own words to demonstrate their understanding of content.

Point value: Short constructed responses are graded on a rubric equal to 2 points.

Science tests that may include these questions: Grade 5, Grade 8, and EOC

Question Type: Short Constructed Response

Example #1: Student view


This example is question #12 in the Biology EOC sampler.

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GUEST, GUEST

The image shows

Before Deforestation After Deforestation



How does the environmental change depicted in the image affect the ecosystem's stability AND its ability to change?

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

B I U [bulleted list] [numbered list] [link] [undo] [redo] [clear]

Question Type: Short Constructed Response

Additional Resources

Additional information about STAAR and STAAR Redesign is available via the following links:

- [STAAR Redesign Resources](#)
- [STAAR Science Resources](#)
- [STAAR Resources for all Assessments](#)