



Coherence and Alignment Among Science Curriculum, Instruction, and Assessment (CASCIA) Project

Grade 8 Unit 3: Understanding Earth History and the Origin of Species

Task 3 Prompt 3 Parts A & B Scored and Annotated Anchor Set

May 2025

Grade 8 Unit 3: Understanding Earth History and the Origin of Species, Task 3 Prompt 3 Parts A & B Scored and Annotated Anchor Set was developed with funding from the U.S. Department of Education under the Competitive Grants for State Assessments Program CFDA 84.368A. The contents of this paper do not represent the policy of the U.S. Department of Education, and no assumption of endorsement by the Federal government should be made.

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CASCIA Grade 8 EOU Assessment 3 Task 3: What Beak-ame of You?

Prompt 3 Parts A & B Score Point 3

Prompt 3 Parts A & B Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 3 Part A. & Part B.	No aspect of the response is correct	Response includes one (1) of the three (3) aspects	Response includes two (2) of the three (3) aspects	Response includes the following aspects: Part A - Contrasts the mechanism of genetic variation by mutation and natural selection Part B - Describes the process of natural selection using a real-world example of both environmental pressure and resulting traits - Describes how the process of a genetic mutation (i.e., eye color) cannot be used to explain the phenomena of finches' beaks	NA

Score Point 3 (3/3 aspects met)

- Part A
 - Contrasts the mechanism of genetic variation by mutation and natural selection.
- Part B
 - Describes the process of natural selection using a real-world example of both environmental pressure and resulting traits.
 - Describes how the process of a genetic mutation (i.e., eye color) cannot be used to explain the phenomena of finches' beaks.

Part A.

How is a genetic mutation, like eye color, **different** from the process of natural selection, like the development of different beak types of finches?

The genetic mutations happen because of a change within DNA, and it doesn't occur because of lack of resources like natural selection.

Part B.

Why does natural selection explain what happened with the finches but not the eye color example?

The finches had a certain type of beak survive because it was best suited for the environment. With eye color, it was not because of the environment, either a random change in a human's DNA.

CASCIA Grade 8 EOU Assessment 3 Task 3: What Beak-ame of You?

Prompt 3 Parts A & B Score Point 2

Prompt 3 Parts A & B Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 3 Part A. & Part B.	No aspect of the response is correct	Response includes one (1) of the three (3) aspects	Response includes two (2) of the three (3) aspects	Response includes the following aspects: Part A - Contrasts the mechanism of genetic variation by mutation and natural selection Part B - Describes the process of natural selection using a real-world example of both environmental pressure and resulting traits - Describes how the process of a genetic mutation (i.e., eye color) cannot be used to explain the phenomena of finches' beaks	NA

Score Point 2 (2/3 aspects met)

- Part A
 - Does **NOT** contrast the mechanism of genetic variation by mutation and natural selection.
- Part B
 - Describes the process of natural selection using a real-world example of both environmental pressure and resulting traits.
 - Describes how the process of a genetic mutation (i.e., eye color) cannot be used to explain the phenomena of finches' beaks.

Part A.

How is a genetic mutation, like eye color, different from the process of natural selection, like the development of different beak types of finches?

When small-beaked finches had offspring, a mutation may have occurred to allow the new bird to have a large beak, and then pass on that trait

Part B.

Why does natural selection explain what happened with the finches but not the eye color example?

Eye color does not effect ones survival however, a larger beak allows for more food access. When the environment changed, the gene for large beaks became predominant while the small beak gene didn't. This is because the small beaked birds mostly died and died! They could not pass on the gene. The change in eye color was not because of natural selection, it was because of a genetic mutation.

CASCIA Grade 8 EOU Assessment 3 Task 3: What Beak-ame of You?

Prompt 3 Parts A & B Score Point 1

Prompt 3 Parts A & B Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 3 Part A. & Part B.	No aspect of the response is correct	Response includes one (1) of the three (3) aspects	Response includes two (2) of the three (3) aspects	Response includes the following aspects: Part A - Contrasts the mechanism of genetic variation by mutation and natural selection Part B - Describes the process of natural selection using a real-world example of both environmental pressure and resulting traits - Describes how the process of a genetic mutation (i.e., eye color) cannot be used to explain the phenomena of finches' beaks	NA

Score Point 1 (1/3 aspects met)

- Part A
 - Does **NOT** contrast the mechanism of genetic variation by mutation and natural selection.
- Part B
 - Describes the process of natural selection using a real-world example of both environmental pressure and resulting traits (i.e., "... they had to eat a specific kind of food. . .").
 - Does **NOT** describe how the process of a genetic mutation (i.e., eye color) cannot be used to explain the phenomena of finches' beaks.

Part A.
How is a genetic mutation, like eye color, **different** from the process of natural selection, like the development of different beak types of finches?

A mutation of eye color is different because it doesn't affect the chance of survival of the organism

Part B.
Why does natural selection explain what happened with the finches but not the eye color example?

The finches were affected because they had to eat a specific kind of food rather than the eyes which just changes their appearance.

CASCIA Grade 8 EOU Assessment 3 Task 3: What Beak-ame of You?

Prompt 3 Parts A & B Score Point 0

Prompt 3 Parts A & B Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 3 Part A. & Part B.	No aspect of the response is correct	Response includes one (1) of the three (3) aspects	Response includes two (2) of the three (3) aspects	Response includes the following aspects: Part A - Contrasts the mechanism of genetic variation by mutation and natural selection Part B - Describes the process of natural selection using a real-world example of both environmental pressure and resulting traits - Describes how the process of a genetic mutation (i.e., eye color) cannot be used to explain the phenomena of finches' beaks	NA

Score Point 0 (0/3 aspects met)

- Part A
 - Does **NOT** contrast the mechanism of genetic variation by mutation and natural selection.
- Part B
 - Does **NOT** describe the process of natural selection using a real-world example of both environmental pressure and resulting traits.
 - Does **NOT** describe how the process of a genetic mutation (i.e., eye color) cannot be used to explain the phenomena of finches' beaks.

Part A.

How is a genetic mutation, like eye color, **different** from the process of natural selection, like the development of different beak types of finches?

Eye color doesn't effect someone enough to harm or help the person.

Part B.

Why does natural selection explain what happened with the finches but not the eye color example?

Because eye color doesn't affect how a person lives unlike a beak would.