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 2 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 2 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.

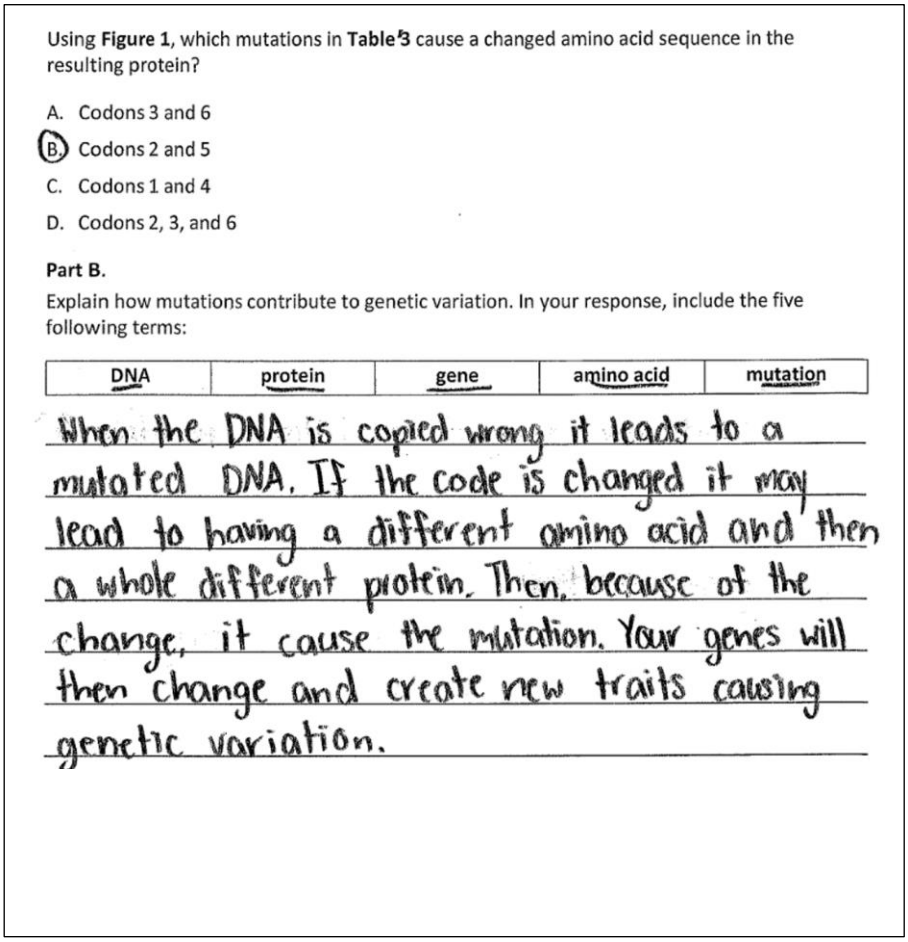
CASCIA Grade 8 EOU Assessment 3 Task 3: What Beak-ame of You?
Prompt 2 Parts A & B Score Point 3

Prompt 2 Parts A & B Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2 Part A. & Part B.	No aspect of the response is correct	Response includes the following aspects: • Selects option B **OR** • A description of how mutations contribute to genetic variation using **two (2)** or **three (3)** of the **five (5)** terms	Response includes the following aspects: • Selects option B • A description of how mutations contribute to genetic variation using **four (4)** of the **five (5)** terms	Response includes the following aspects: • Selects option B • A description of how mutations contribute to genetic variation using all **five (5)** terms	NA

Score Point 3 (3/3 aspects met)

- Part A
  - Selects option B.
- Part B
  - Describes how mutations contribute to genetic variation using all **five (5)** terms.



Using **Figure 1**, which mutations in **Table 3** cause a changed amino acid sequence in the resulting protein?

A. Codons 3 and 6
B. Codons 2 and 5
C. Codons 1 and 4
D. Codons 2, 3, and 6

Part B.

Explain how mutations contribute to genetic variation. In your response, include the five following terms:

DNA	protein	gene	amino acid	mutation

When the DNA is copied wrong it leads to a mutated DNA. If the code is changed it may lead to having a different amino acid and then a whole different protein. Then, because of the change, it cause the mutation. Your genes will then change and create new traits causing genetic variation.

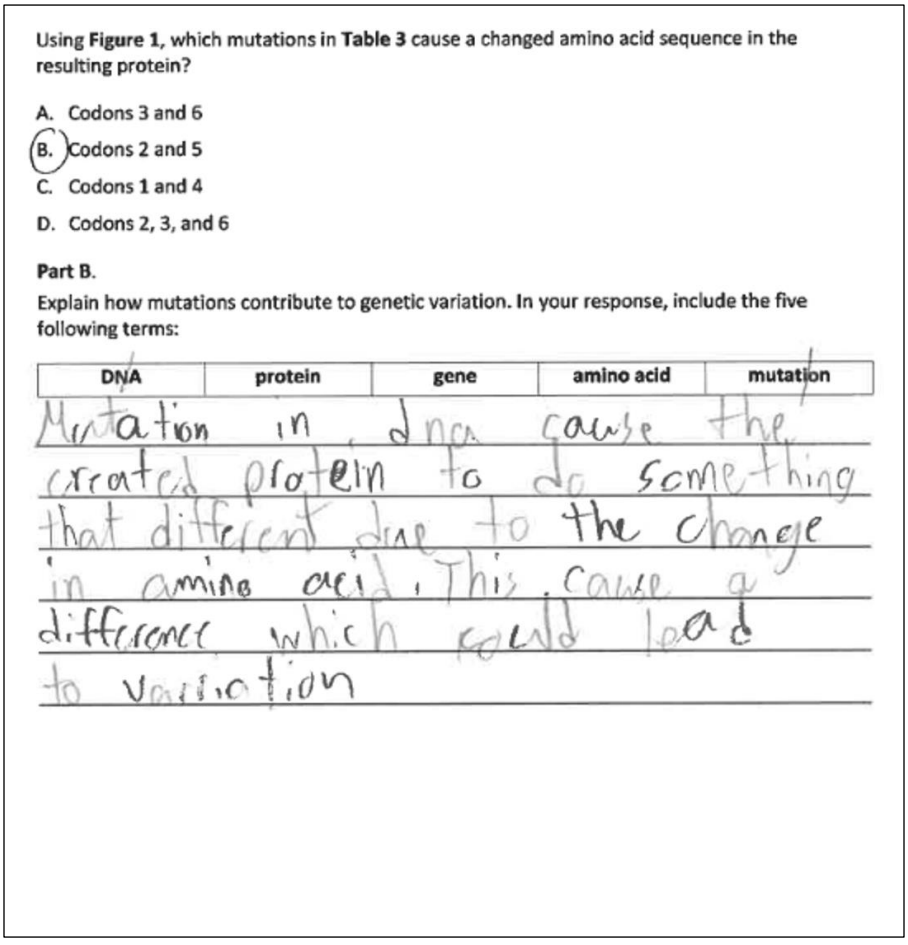
CASCIA Grade 8 EOU Assessment 3 Task 3: What Beak-ame of You?
Prompt 2 Parts A & B Score Point 2

Prompt 2 Parts A & B Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2 Part A. & Part B.	No aspect of the response is correct	Response includes the following aspects: • Selects option B **OR** • A description of how mutations contribute to genetic variation using **two (2)** or **three (3)** of the **five (5)** terms	Response includes the following aspects: • Selects option B • A description of how mutations contribute to genetic variation using **four (4)** of the **five (5)** terms	Response includes the following aspects: • Selects option B • A description of how mutations contribute to genetic variation using all **five (5)** terms	NA

Score Point 2 (2/3 aspects met)

- Part A
  - Selects option B.
- Part B
  - Describes how mutations contribute to genetic variation using **four (4)** of the **five (5)** terms.



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Part B.

Explain how mutations contribute to genetic variation. In your response, include the five following terms:

DNA	protein	gene	amino acid	mutation

Mutation in dna cause the created protein to do something that different due to the change in amino acid. This cause a difference which could lead to variation

CASCIA Grade 8 EOU Assessment 3 Task 3: What Beak-ame of You?
Prompt 2 Parts A & B Score Point 1

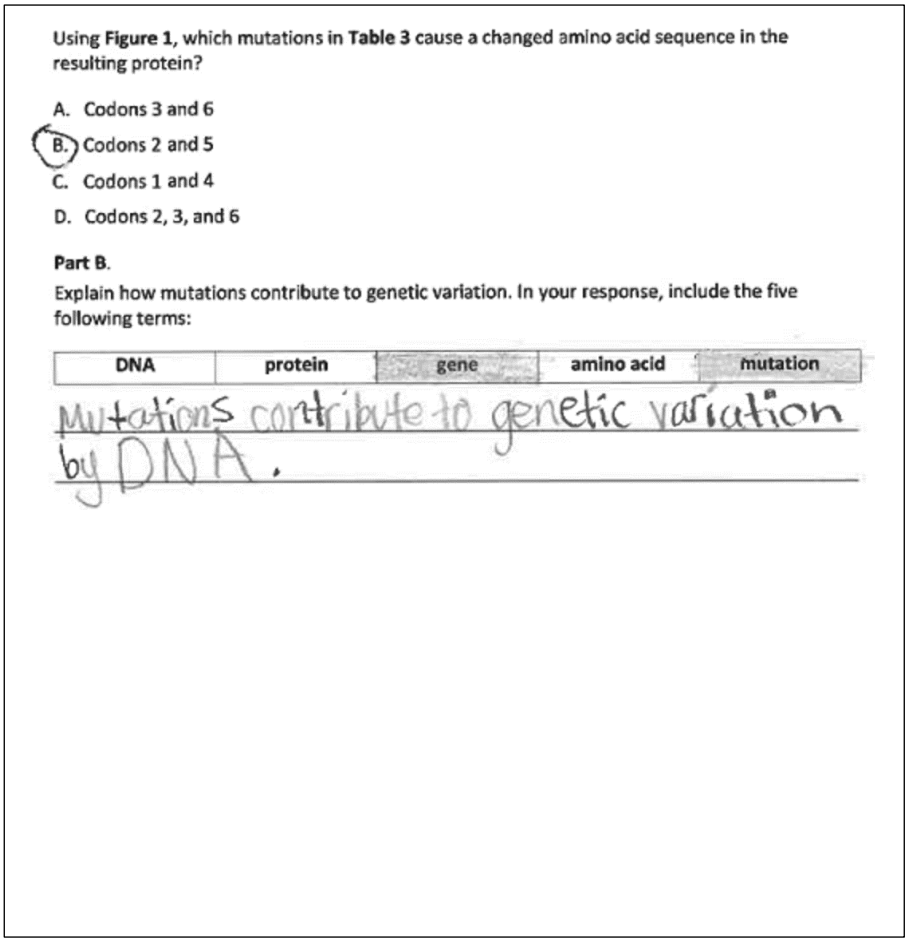
Prompt 2 Parts A & B Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2 Part A. & Part B.	No aspect of the response is correct	Response includes the following aspects: • Selects option B **OR** • A description of how mutations contribute to genetic variation using **two (2)** or **three (3)** of the **five (5)** terms	Response includes the following aspects: • Selects option B • A description of how mutations contribute to genetic variation using **four (4)** of the **five (5)** terms	Response includes the following aspects: • Selects option B • A description of how mutations contribute to genetic variation using all **five (5)** terms	NA

Score Point 1 (1/3 aspects met)

- Part A
  - Selects option B.
- Part B
  - Does **NOT** describe how mutations contribute to genetic variation using **two (2)** or **three (3)** of the **five (5)** terms.

NOTE: The student response includes two terms but does not explain HOW mutations contribute to genetic variation.



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Part B.

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DNA	protein	gene	amino acid	mutation

Mutations contribute to genetic variation by DNA.

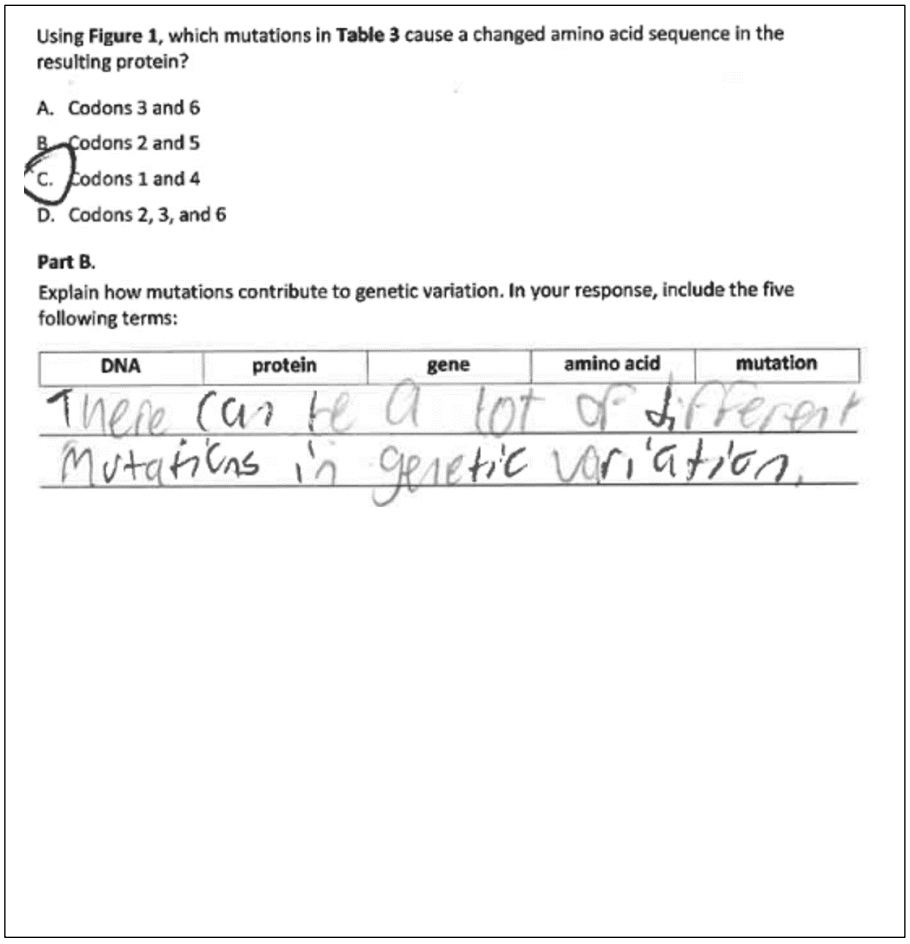
CASCIA Grade 8 EOU Assessment 3 Task 3: What Beak-ame of You?
Prompt 2 Parts A & B Score Point 0

Prompt 2 Parts A & B Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2 Part A. & Part B.	No aspect of the response is correct	Response includes the following aspects: • Selects option B **OR** • A description of how mutations contribute to genetic variation using **two (2)** or **three (3)** of the **five (5)** terms	Response includes the following aspects: • Selects option B • A description of how mutations contribute to genetic variation using **four (4)** of the **five (5)** terms	Response includes the following aspects: • Selects option B • A description of how mutations contribute to genetic variation using all **five (5)** terms	NA

Score Point 0 (0/3 aspects met)

- Part A
  - Does **NOT** select option B.
- Part B
  - Does **NOT** describe how mutations contribute to genetic variation using at least **two (2)** or **three (3)** of the **five (5)** terms.



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Part B.

Explain how mutations contribute to genetic variation. In your response, include the five following terms:

DNA	protein	gene	amino acid	mutation

There can be a lot of different Mutations in genetic variation.