

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 1 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 1 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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Prompt 1 Parts A & B Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1 Part A. & Part B.	No aspect of the response is correct	Identifies one (1) of the five (5) aspects	Identifies two (2) of the five (5) aspects	Identifies three (3) or four (4) of the five (5) aspects	 Response includes the following aspects: Graph with x- and y- labels (x-axis labeled as "Beak Sizes" and y-axis labeled as "Number of Birds") Axes shown as x-axis Beak Sizes ("Very Small Beaks", "Small Beaks", "Large Beaks", and "Very Large Beaks"); y-axis ("Number of Birds") Bars accurately represent the four beak types under both conditions Explanation of why the birds with smaller beaks' population decreased Explanation of why the percentage of birds with larger beaks did not decrease as much as a result of the drought

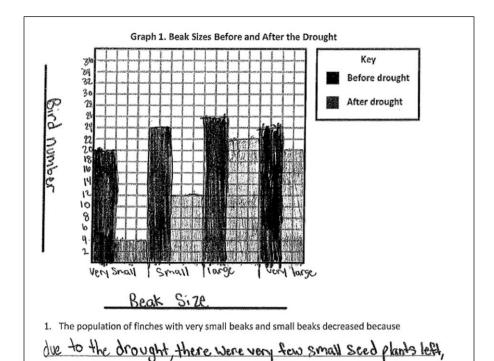
Score Point 4 (4/4 aspects met)

Part A

- Includes a graph with correct x- and y- labels.
- Includes axes shown as x-axis "Beak Sizes" and y-axis "Number of Birds."
- Includes bars that accurately represent the four beak types under both conditions.

Part B

- Explains why the birds with smaller beaks' population decreased.
- Explains why the percentage of birds with larger beaks does not decrease as much due to the drought.



which caused those birds to either die off or leave.

2. Why was the population size of the birds with large and very large beaks less affected by the drought than the population of finches with small and very small beaks?

The larger beaked birds had many more food sources because

they can eat a bigger variety than the small beaked birds.

Prompt 1 Parts A & B Rubric

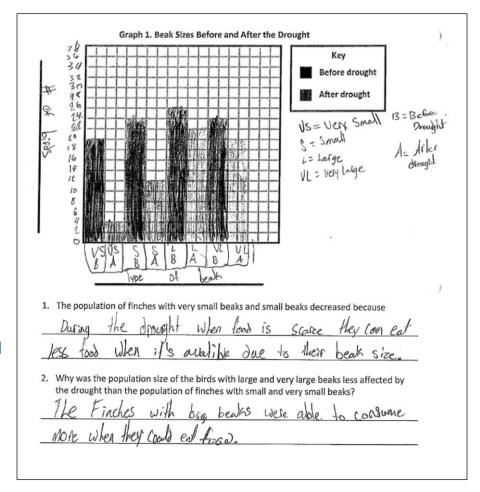
Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1 Part A. & Part B.	No aspect of the response is correct	Identifies one (1) of the five (5) aspects	Identifies two (2) of the five (5) aspects	Identifies three (3) or four (4) of the five (5) aspects	 Response includes the following aspects: Graph with x- and y- labels (x-axis labeled as "Beak Sizes" and y-axis labeled as "Number of Birds") Axes shown as x-axis Beak Sizes ("Very Small Beaks", "Small Beaks", "Large Beaks", and "Very Large Beaks"); y-axis ("Number of Birds") Bars accurately represent the four beak types under both conditions Explanation of why the birds with smaller beaks' population decreased Explanation of why the percentage of birds with larger beaks did not decrease as much as a result of the drought

Score Point 3 (3/4 aspects met)

Part A

- Includes a graph with correct x- and y- labels
- Includes axes shown as x-axis "Beak Sizes" and y-axis "Number of Birds."
- Includes bars that accurately represent the four beak types under both conditions.

- Does NOT explain why the birds with smaller beaks' population decreased (i.e., the student attributes survival to quantity of food rather than size of seeds).
- Does NOT explain why the percentage of birds with larger beaks does not decrease as much due to the drought.



Prompt 1 Parts A & B Rubric

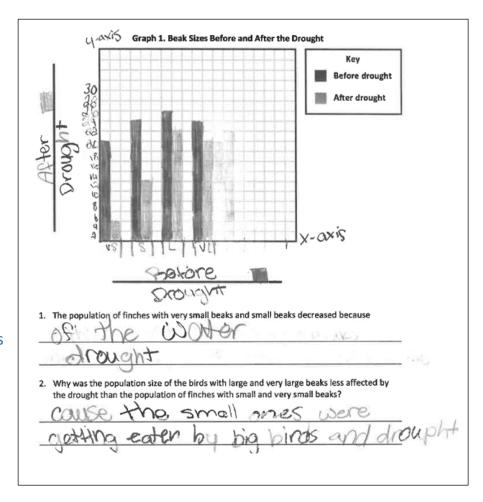
Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1 Part A. & Part B.	No aspect of the response is correct	Identifies one (1) of the five (5) aspects	Identifies two (2) of the five (5) aspects	Identifies three (3) or four (4) of the five (5) aspects	 Response includes the following aspects: Graph with x- and y- labels (x-axis labeled as "Beak Sizes" and y-axis labeled as "Number of Birds") Axes shown as x-axis Beak Sizes ("Very Small Beaks", "Small Beaks", "Large Beaks", and "Very Large Beaks"); y-axis ("Number of Birds") Bars accurately represent the four beak types under both conditions Explanation of why the birds with smaller beaks' population decreased Explanation of why the percentage of birds with larger beaks did not decrease as much as a result of the drought

Score Point 2 (2/4 aspects met)

Part A

- Does **NOT** include a graph with correct x- and y- labels (i.e., the student graphs the data correctly but mislabels the axes).
- Includes axes shown as x-axis "Beak Sizes" and y-axis "Number of Birds."
- Includes bars that accurately represent the four beak types under both conditions.

- Does NOT explain why the birds with smaller beaks' population decreased (i.e., the student states that the drought is the cause but does not explain).
- Does **NOT** explain why the percentage of birds with larger beaks does not decrease as much due to the drought.



Prompt 1 Parts A & B Rubric

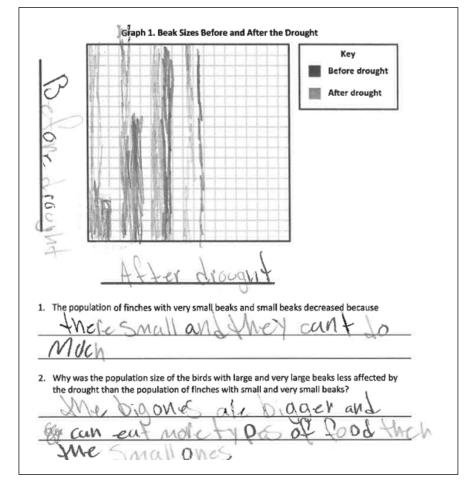
Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1 Part A. & Part B.	No aspect of the response is correct	Identifies one (1) of the five (5) aspects	Identifies two (2) of the five (5) aspects	Identifies three (3) or four (4) of the five (5) aspects	 Response includes the following aspects: Graph with x- and y- labels (x-axis labeled as "Beak Sizes" and y-axis labeled as "Number of Birds") Axes shown as x-axis Beak Sizes ("Very Small Beaks", "Small Beaks", "Large Beaks", and "Very Large Beaks"); y-axis ("Number of Birds") Bars accurately represent the four beak types under both conditions Explanation of why the birds with smaller beaks' population decreased Explanation of why the percentage of birds with larger beaks did not decrease as much as a result of the drought

Score Point 1 (1/4 aspects met)

Part A

- Does NOT include a graph with correct x- and y- labels.
- Does NOT include axes shown as x-axis "Beak Sizes" and y-axis "Number of Birds."
- Does **NOT** include bars that accurately represent the four beak types under both conditions.

- Does **NOT** explain why the birds with smaller beaks' population decreased.
- Explains why the percentage of birds with larger beaks does not decrease as much due to the drought.



Prompt 1 Parts A & B Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 1 Part A. & Part B.	No aspect of the response is correct	Identifies one (1) of the five (5) aspects	Identifies two (2) of the five (5) aspects	Identifies three (3) or four (4) of the five (5) aspects	 Response includes the following aspects: Graph with x- and y- labels (x-axis labeled as "Beak Sizes" and y-axis labeled as "Number of Birds") Axes shown as x-axis Beak Sizes ("Very Small Beaks", "Small Beaks", "Large Beaks", and "Very Large Beaks"); y-axis ("Number of Birds") Bars accurately represent the four beak types under both conditions Explanation of why the birds with smaller beaks' population decreased Explanation of why the percentage of birds with larger beaks did not decrease as much as a result of the drought

Score Point 0 (0/4 aspects met)

Part A

- Does **NOT** include a graph with correct x- and y- labels.
- Does NOT include axes shown as x-axis "Beak Sizes" and y-axis "Number of Birds."
- Does **NOT** include bars that accurately represent the four beak types under both conditions.

- Does **NOT** explain why the birds with smaller beaks' population decreased.
- Does NOT explain why the percentage of birds with larger beaks does not decrease as much due to the drought.

