



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

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

Task 1 Prompt 2 Part C Scored and Annotated Anchor Set

May 2025

Grade 8 Unit 3: Understanding Earth History and the Origin of Species, Task 1 Prompt 2 Part C 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 1: A Whale of a Tale!

Prompt 2 Part C Score Point 3

Prompt 2 Part C Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2 Part C.	No aspect of the response is correct	Identifies one (1) of the three (3) aspects	Identifies two (2) of the three (3) aspects	Response includes the following aspects: - Describes the changes to features that are advantageous to living in water - Identifies structural similarities in the fossil sequence - Identifies evidence to support the claim	NA

Score Point 3 (3/3 aspects met)

- Part C
 - Describes the changes to features that are advantageous to living in water.
 - Identifies structural similarities in the fossil sequence leading to modern whales.
 - Identifies evidence to support the claim.

Part C.

Use your completed Figure 3 to support the following claim:

Prehistoric creatures with whale-like features once lived on land. The fossil record shows a gradual change in physical features which corresponds to adaptation to living in aquatic environments. These adaptations led to modern-day whales.

Include information about:

- Features for living on land versus living in water
- Structures of the fossils which resemble modern whales
- Transitional forms of prehistoric creatures to more well-known species of groups of organisms

Hind legs and long front limbs would be good to live on land while a long tail and shorter, malleable flippers would be great for swimming underwater.

We see these different adaptations in the separate species of whales. In the prehistoric whale fossils, the long tails and larger head are similar to today's whales. As the whale transitioned from land to water, many things in its bone structure changed. Its hind limbs were evolved out over time and were

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replaced with flippers as the whale we know today.

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Prompt 2 Part C Score Point 2

Prompt 2 Part C Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2 Part C.	No aspect of the response is correct	Identifies one (1) of the three (3) aspects	Identifies two (2) of the three (3) aspects	Response includes the following aspects: - Describes the changes to features that are advantageous to living in water - Identifies structural similarities in the fossil sequence - Identifies evidence to support the claim	NA

Score Point 2 (2/3 aspects met)

- Part C
 - Describes the changes to features that are advantageous to living in water (i.e., "... legs shorten into a flipper-like appendage").
 - Identifies structural similarities in the fossil sequence leading to modern whales (i.e., "The fossil structure over time begins to look more and more like a whale.").
 - Does **NOT** identify evidence to support the claim (response concludes with a reference to the fossil record of snakes).

Part C.

Use your completed **Figure 3** to support the following claim:

Prehistoric creatures with whale-like features once lived on land. The fossil record shows a gradual change in physical features which corresponds to adaptation to living in aquatic environments. These adaptations led to modern-day whales.

Include information about:

- Features for living on land versus living in water
- Structures of the fossils which resemble modern whales
- Transitional forms of prehistoric creatures to more well-known species of groups of organisms

The prehistoric whale fossils show legs, which would be needed: living on land, and over time, the legs shorten into a flipper-like appendage. The fossil structure over time begins to look more and more like a whale with its short appendages, and longer spines. This same idea is true to many other species around today, like prehistoric snake-like serpents having legs.

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Prompt 2 Part C Score Point 1

Prompt 2 Part C Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2 Part C.	No aspect of the response is correct	Identifies one (1) of the three (3) aspects	Identifies two (2) of the three (3) aspects	Response includes the following aspects: - Describes the changes to features that are advantageous to living in water - Identifies structural similarities in the fossil sequence - Identifies evidence to support the claim	NA

Score Point 1 (1/3 aspects met)

- Part C
 - Describes the changes to features that are advantageous to living in water (i.e., “for land has legs and water no legs”).
 - Does **NOT** identify structural similarities in the fossil sequence leading to modern whales.
 - Does **NOT** identify evidence to support the claim.

Part C.
Use your completed **Figure 3** to support the following claim:

Prehistoric creatures with whale-like features once lived on land. The fossil record shows a gradual change in physical features which corresponds to adaptation to living in aquatic environments. These adaptations led to modern-day whales.

Include information about:

- Features for living on land versus living in water
- Structures of the fossils which resemble modern whales
- Transitional forms of prehistoric creatures to more well-known species of groups of organisms

for land has legs
and water no legs
long bones
not a leg

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Prompt 2 Part C Score Point 0

Prompt 2 Part C Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 2 Part C.	No aspect of the response is correct	Identifies one (1) of the three (3) aspects	Identifies two (2) of the three (3) aspects	Response includes the following aspects: - Describes the changes to features that are advantageous to living in water - Identifies structural similarities in the fossil sequence - Identifies evidence to support the claim	NA

Score Point 0 (0/3 aspects met)

- Part C
 - Does **NOT** describe the changes to features that are advantageous to living in the water (i.e., the student states that the skeletons have different designs but does not specify the change or describe how they are advantageous).
 - Does **NOT** identify structural similarities in the fossil sequence leading to modern whales.
 - Does **NOT** identify evidence to support the claim.

Part C.

Use your completed **Figure 3** to support the following claim:

Prehistoric creatures with whale-like features once lived on land. The fossil record shows a gradual change in physical features which corresponds to adaptation to living in aquatic environments. These adaptations led to modern-day whales.

Include information about:

- Features for living on land versus living in water
- Structures of the fossils which resemble modern whales
- Transitional forms of prehistoric creatures to more well-known species of groups of organisms

the skeletons have different designs.