



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

Grade 5 Unit 3: Earth Systems and the Solution of Water Problems

Task 3 Prompt 2 Parts A & B Scored and Annotated Anchor Set

May 2025

Grade 5 Unit 3: Earth Systems and the Solution of Water Problems, 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.

All rights reserved. Any or all portions of this document may be reproduced and distributed without prior permission, provided the source is cited as: Coherence and Alignment Among Science Curriculum, Instruction, and Assessment (CASCIA) Project. (2025). *Grade 5 Unit 3: Earth Systems and the Solution of Water Problems, Task 3 Prompt 2 Parts A & B Scored and Annotated Anchor Set*. Lincoln, NE: Nebraska Department of Education.

CASCIA Grade 5 EOU Assessment 3 Task 3: Protecting Earth's Soil

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 one (1) of the two (2) aspects	Response includes the following aspects: Part A - Identifies that wind erosion is represented by the interaction between the atmosphere (or wind) and the geosphere (or soil) Part B - A description of how the interaction of the atmosphere or wind and the geosphere or soil will result in a loss of topsoil or a reduction in crop production	NA	NA

Score Point 2 (2/2 aspects met)

- Part A
 - Identifies wind erosion is represented by the interaction between the atmosphere (or wind) and the geosphere (or soil).
- Part B
 - Includes a description of the effects of wind erosion on the topsoil.

Part A.

Identify the type of erosion represented in Figure 4 and explain the interaction between the two Earth spheres.

The type of erosion is wind erosion. The wind is atmosphere and dirt is geosphere. They are interacting by the wind blowing the dirt.

Part B.

Explain how this type of erosion, shown in Figure 4, will negatively affect the Murdoch's crop production. Remember, fertile soil has a thick top layer where plant roots can take hold.

Wind erosion will effect the field badly because the fertile crop soil will blow away. You will then have no good soil to plant in.

CASCIA Grade 5 EOU Assessment 3 Task 3: Protecting Earth's Soil

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 one (1) of the two (2) aspects	Response includes the following aspects: Part A - Identifies that wind erosion is represented by the interaction between the atmosphere (or wind) and the geosphere (or soil) Part B - A description of how the interaction of the atmosphere or wind and the geosphere or soil will result in a loss of topsoil or a reduction in crop production	NA	NA

Score Point 1 (1/2 aspects met)

- Part A
 - Does **NOT** identify wind erosion is represented by the interaction between the atmosphere (or wind) and the geosphere (or soil).
- Part B
 - Includes a description of the effects of wind erosion on the topsoil.

Part A.

Identify the type of erosion represented in **Figure 4** and explain the interaction between the two Earth spheres.

the Atmosphere is blowing the Geosphere.

Part B.

Explain how this type of erosion, shown in **Figure 4**, will **negatively** affect the Murdoch's crop production. Remember, fertile soil has a thick top layer where plant roots can take hold.

The wind will blow away the top soil. Which will negatively affect Murdock's crops.

CASCIA Grade 5 EOU Assessment 3 Task 3: Protecting Earth's Soil

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 one (1) of the two (2) aspects	Response includes the following aspects: Part A - Identifies that wind erosion is represented by the interaction between the atmosphere (or wind) and the geosphere (or soil) Part B - A description of how the interaction of the atmosphere or wind and the geosphere or soil will result in a loss of topsoil or a reduction in crop production	NA	NA

Score Point 0 (0/2 aspects met)

- Part A
 - Does **NOT** identify wind erosion is represented by the interaction between the atmosphere (or wind) and the geosphere (or soil).
- Part B
 - Does **NOT** include a description of the effects of wind erosion on the topsoil.

Part A.

Identify the type of erosion represented in Figure 4 and explain the interaction between the two Earth spheres.

Part B.

Explain how this type of erosion, shown in Figure 4, will negatively affect the Murdoch's crop production. Remember, fertile soil has a thick top layer where plant roots can take hold.

the soil helps the plant grow and the sun top
