



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

Grade 5 Unit 2: Matter and Energy in Organisms and Ecosystems

Task 2 Prompt 3 Scored and Annotated Anchor Sets

April 2025

Grade 5 Unit 2: Matter and Energy in Organisms and Ecosystems, Task 2 Prompt 3 Scored and Annotated Anchor Sets 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 5 EOU Assessment 2 Task 2: Our Friend the Worm

Prompt 3 Score Point 3

Prompt 3 Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 3	No aspect of the response is correct	Only includes one (1) of the three (3) aspects	Only includes two (2) of the three (3) aspects	Response includes the following aspects: Part A - Correct placement of decomposers, animals, and plants Part B - Describes the model as showing the transfer of energy from the sun to plants, then to animals, then to decomposers, and back to plants - Describes how composting or decomposing organic materials, which uses energy from the sun to grow, creates nutrients used by plants to grow	NA

Score Point 3 (3/3 aspects met)

- Part A
 - Places correctly decomposers, animals, and plants in the model.
- Part B
 - Describes how energy from the sun is transferred from plants to animals to decomposers, and back to plants.
 - Describes how composting or decomposing organic materials creates nutrients used by plants to grow.

Model 1. Energy Transfer

Part B.
Support the claim below with at least **two** pieces of evidence. Use **Model 1** and your science knowledge to determine the evidence.

Claim:

Energy from the sun becomes part of the nutrients in the soil that help plants grow.

First, my model shows That plants take in energy from the sun, then an animal eats the plant. When the animal ate it, it got energy. Then a decomposer ate the animal.

Second, I know that The decomposer will then make compost and grow another plant.

CASCIA Grade 5 EOU Assessment 2 Task 2: Our Friend the Worm

Prompt 3 Score Point 2

Prompt 3 Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 3	No aspect of the response is correct	Only includes one (1) of the three (3) aspects	Only includes two (2) of the three (3) aspects	Response includes the following aspects: Part A - Correct placement of decomposers, animals, and plants Part B - Describes the model as showing the transfer of energy from the sun to plants, then to animals, then to decomposers, and back to plants - Describes how composting or decomposing organic materials, which uses energy from the sun to grow, creates nutrients used by plants to grow	NA

Score Point 2 (2/3 aspects met)

- Part A
 - Places correctly decomposers, animals, and plants in the model.
- Part B
 - Describes how energy from the sun is transferred from plants to animals to decomposers, and back to plants.

NOTE: The student response includes, "... and the cycle continues."

- Does **NOT** describe how composting or decomposing organic materials creates nutrients used by plants to grow.

Show the energy transfer in **Model 1**. Write the terms below in the correct boxes in the model.

- Decomposers
- Animals
- Plants

Model 1. Energy Transfer

Part B.
Support the claim below with at least **two** pieces of evidence. Use **Model 1** and your science knowledge to determine the evidence.

Claim:

Energy from the sun becomes part of the nutrients in the soil that help plants grow.

First, my model shows that the sun goes into the plant and the plant goes into the animal that goes into the decomposer.

Second, I know that the decomposers loop and the cycle continues.

CASCIA Grade 5 EOU Assessment 2 Task 2: Our Friend the Worm

Prompt 3 Score Point 1

Prompt 3 Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 3	No aspect of the response is correct	Only includes one (1) of the three (3) aspects	Only includes two (2) of the three (3) aspects	Response includes the following aspects: Part A - Correct placement of decomposers, animals, and plants Part B - Describes the model as showing the transfer of energy from the sun to plants, then to animals, then to decomposers, and back to plants - Describes how composting or decomposing organic materials, which uses energy from the sun to grow, creates nutrients used by plants to grow	NA

Score Point 1 (1/3 aspects met)

- Part A
 - Places correctly decomposers, animals, and plants in the model.
- Part B
 - Does **NOT** describe how energy from the sun is transferred from plants to animals to decomposers, and back to plants.

NOTE: The student response only includes that "... the sun is first ..."

- Does **NOT** describe how composting or decomposing organic materials creates nutrients used by plants to grow.

Show the energy transfer in **Model 1**. Write the terms below in the correct boxes in the model.

- Decomposers
- Animals
- Plants

Model 1. Energy Transfer

The diagram shows a flow of energy. On the left, the Sun, Air, and Water have arrows pointing to a box labeled 'Plants'. An arrow points from 'Plants' to a box labeled 'animals'. Below these boxes is a horizontal line representing the ground. Below the ground line is a box labeled 'decomposers'. Arrows point from the 'Plants' and 'animals' boxes down to the 'decomposers' box. An arrow points from the 'decomposers' box back up to the 'Plants' box, completing the cycle.

Part B.
Support the claim below with at least **two** pieces of evidence. Use **Model 1** and your science knowledge to determine the evidence.

Claim:

Energy from the sun becomes part of the nutrients in the soil that help plants grow.

First, my model shows that the sun is first and all so if plants doesn't get light i can't die

Second, I know that if plants don't get sun it won't grow

CASCIA Grade 5 EOU Assessment 2 Task 2: Our Friend the Worm

Prompt 3 Score Point 0

Prompt 3 Rubric

Prompt	Score Point 0	Score Point 1	Score Point 2	Score Point 3	Score Point 4
Prompt 3	No aspect of the response is correct	Only includes one (1) of the three (3) aspects	Only includes two (2) of the three (3) aspects	Response includes the following aspects: Part A - Correct placement of decomposers, animals, and plants Part B - Describes the model as showing the transfer of energy from the sun to plants, then to animals, then to decomposers, and back to plants - Describes how composting or decomposing organic materials, which uses energy from the sun to grow, creates nutrients used by plants to grow	NA

Score Point 0 (0/3 aspects met)

- Part A
 - Does **NOT** correctly place decomposers, animals, and plants in the model.
- Part B
 - Does **NOT** describe how energy from the sun is transferred from plants to animals to decomposers, and back to plants.

NOTE: The student response describes plants needing sunlight to grow (i.e., . . . the right way but also pretty . . .”

- Does **NOT** describe how composting or decomposing organic materials creates nutrients used by plants to grow.

Model 1. Energy Transfer

Part B.
Support the claim below with at least **two** pieces of evidence. Use **Model 1** and your science knowledge to determine the evidence.

Claim:

Energy from the sun becomes part of the nutrients in the soil that help plants grow.

First, my model shows because plants can't have too much water so when the sun comes all of the energy goes into the soil and helps it grow the right way not with colored but also pretty

Second, I know that because the sun in the soil works together so the plant grows but also the plant doesn't die in a second so you need water soil the sun and animals to make your plant happy.