

# 2025 MCAS Sample Student Work and Scoring Guide

## Grade 5 Science and Technology/Engineering Question 10: Constructed-Response

**Reporting Category:** Life Science

**Practice Category:** Evidence, Reasoning, and Modeling

**Standard:** [5.PS.3.1](#) - Use a model to describe that the food animals digest (a) contains energy that was once energy from the Sun, and (b) provides energy and nutrients for life processes, including body repair, growth, motion, body warmth, and reproduction.

**Item Description:** Identify the original source of energy for an ecosystem and complete a model that represents the flow of energy in the ecosystem.

This item can be found in the released item sets on the [MCAS Resource Center](#).

### Scoring Guide

*Select a score point in the table below to view the sample student response.*

Score	Description
<a href="#">2</a>	The response demonstrates a thorough understanding that energy flows through an ecosystem. The response correctly identifies the original source of energy in this ecosystem. The response also correctly completes a model to show the flow of energy in the ecosystem.
<a href="#">1</a>	The response demonstrates a partial understanding that energy flows through an ecosystem.
<a href="#">0</a>	The response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.

**Score Point 2**

**This question has two parts.**

In an ecosystem, birds prey on snails, and snails eat grass. Mice also eat grass.

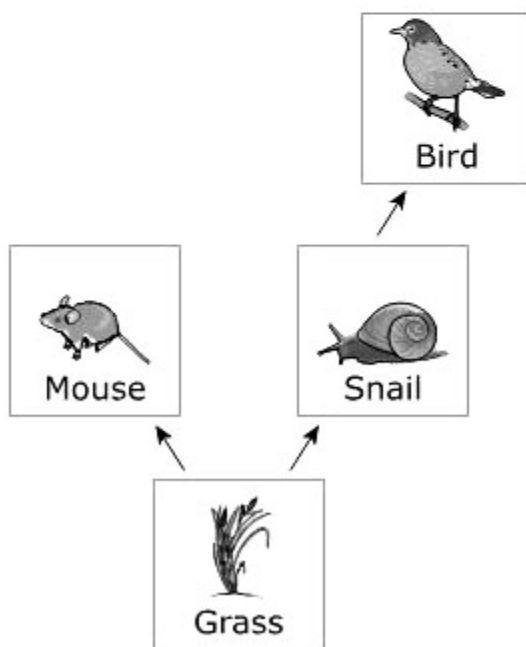
**Part A**

Identify the original source of energy in this ecosystem.

The original source of energy is the sun.

**Part B**

Drag and drop a picture into each box to represent the flow of energy in this ecosystem.



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**Score Point 1**

**This question has two parts.**

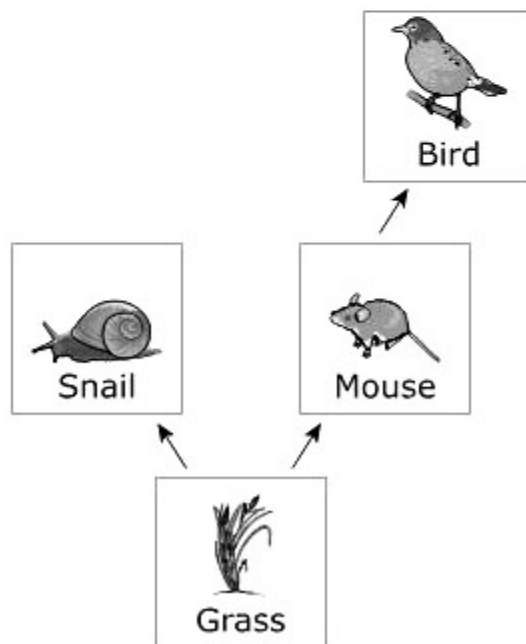
In an ecosystem, birds prey on snails, and snails eat grass. Mice also eat grass.

**Part A**

Identify the original source of energy in this ecosystem.

**Part B**

Drag and drop a picture into each box to represent the flow of energy in this ecosystem.



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**Score Point 0**

**This question has two parts.**

In an ecosystem, birds prey on snails, and snails eat grass. Mice also eat grass.

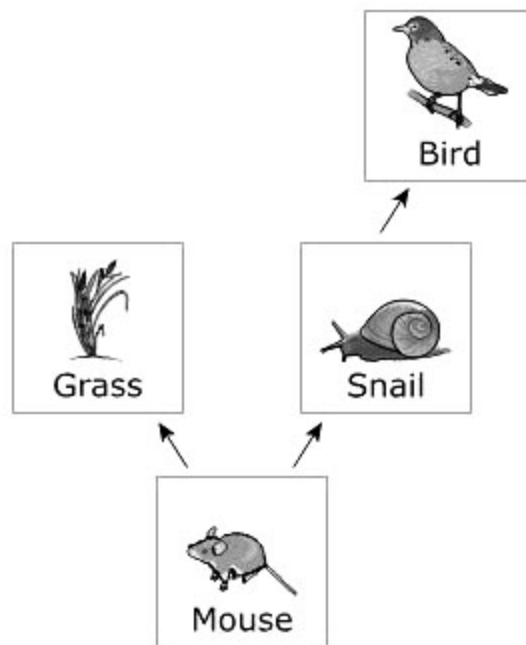
**Part A**

Identify the original source of energy in this ecosystem.

The energy is food.

**Part B**

Drag and drop a picture into each box to represent the flow of energy in this ecosystem.



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