

# 2023 MCAS Sample Student Work and Scoring Guide

## Grade 8 Science and Technology/Engineering Question 9: Constructed-Response

**Reporting Category:** Earth and Space Science

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

**Standard:** [6.ESS.2.3](#) - Analyze and interpret maps showing the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence that Earth's plates have moved great distances, collided, and spread apart.

**Item Description:** Identify pieces of evidence supporting the claim that two continents were once one landmass and explain the reasoning.

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### 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 Earth's plates have moved great distances. The response correctly identifies two pieces of evidence that support the claim that the two continents were once part of one large landmass and clearly explains how each piece of evidence supports the claim.
<a href="#">1</a>	The response demonstrates a partial understanding that Earth's plates have moved great distances.
<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**

The dark-shaded areas of the map show where fossils of *Cynognathus*, an extinct land reptile, were found on two continents.



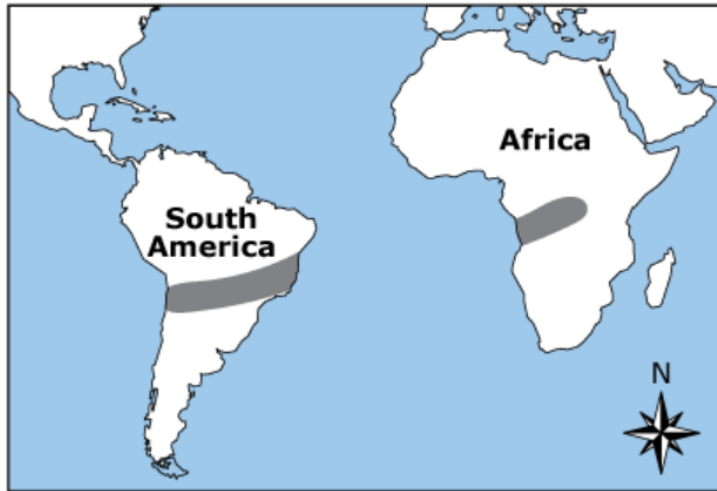
Based on the map, identify **two** pieces of evidence that support the claim that the two continents were once part of one large landmass. Explain how **each** piece of evidence supports the claim.

One piece of evidence that supports the claim that the two continents were once part of one landmass is that they look like they could fit together, similar to puzzle pieces. Another piece of evidence is that fossils of *Cynognathus* were found on both continents, and since *Cynognathus* is a land reptile, it could not have crossed the ocean.

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**Score Point 1**

The dark-shaded areas of the map show where fossils of *Cynognathus*, an extinct land reptile, were found on two continents.



Based on the map, identify **two** pieces of evidence that support the claim that the two continents were once part of one large landmass. Explain how **each** piece of evidence supports the claim.

The 2 continents could have been together because the fossils of cynognathus couldnt have been in 2 places at once. Another piece of evidence is that the animals where land animals which means they dont live in the ocean. So the continents would have to have been together at one point because the fossils where found on two different continents that are now seperated by the ocean.

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**Score Point 0**

The dark-shaded areas of the map show where fossils of *Cynognathus*, an extinct land reptile, were found on two continents.



Based on the map, identify **two** pieces of evidence that support the claim that the two continents were once part of one large landmass. Explain how **each** piece of evidence supports the claim.

the two continents were one giant continent but the tectonic plates moved all the continents away slowly over time.

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