

### Formative Assessment #3

**Concept(s)  
Addressed**

Wegener's evidence for continental drift includes fossils, continent shapes, and glacial deposits. Rock studies at sea floor spread areas provided evidence that older rocks subducted and newer rocks spread across the sea floor.

**Time**

20 minutes

**Materials**

Individual  
Prompt

**Advance**

**preparation**

1. Duplicate prompt for each student

**Procedure:**

1. Tell students they will have an opportunity to share what they understand about evidence for continental drift patterns.
2. Distribute the prompt to each student and ask him/her to do his/her best work.

Name \_\_\_\_\_

**Grade Six: Plate Tectonics  
Formative Assessment #3**

**Multiple Choice:**

Directions: Please circle the best answer.

1. Who first proposed the theory of continental drift?
  - a. Darwin
  - b. Wegener
  - c. Pangaea
  - d. Newton
  
2. Continental drift is explained by which of the following?
  - a. Earth's surface has seven landmasses
  - b. The continents do not move
  - c. Earth is slowly cooling and shrinking.
  - d. The continents were a single landmass
  
3. Most scientists rejected Wegener's idea of continental drift because:
  - a. multiple types of evidence were used as support
  - b. the climate of Pangaea was described
  - c. the force that pushes or pulls continents could not be explained
  - d. the ring of fire was evidence

**Justified Multiple Choice**

Directions: Please circle the best answer and explain why it is the best answer using science terms.

4. Predict what would happen if the seafloor were not spreading?
  - a. Wegener would have evidence for continental drift
  - b. There would be more earthquakes
  - c. No new crust would be formed
  - d. Sea levels would be higher

**Science "reason:"** \_\_\_\_\_

\_\_\_\_\_

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**Open Response**

Directions: Please answer the following questions using complete sentences.

5. What four types of evidence were used to prove that a continent was once part of the larger continent?

6. Use your model made in class to describe the process of sea floor spread. Include the terms from the word bank below in the explanation.

mid-ocean ridge	spreading	subduction
denser rock		molten material

**Grade Six: Plate Tectonics**  
**Formative Assessment #3**  
**Expected Student Response for High Quality Responses**

**Multiple Choice:**

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**Science "reason:"**

*Evidence for new crust is documented by age of rocks at sea floor spread areas.*

## Open Response

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5. What four types of evidence were used to prove that a continent was once part of the larger continent?

*1. Continents appear like puzzle pieces that may have fit together. 2. Fossils on each piece of the (continent) puzzle match to the other. 3. Glacial deposits and some mountains matched between current continents. 4. Sea floor spreading showed evidence of newer rock material from plates pulling apart deep in the ocean.*

6. Use your model made in class to describe the process of sea floor spread. Include the terms from the word bank below in the explanation.

mid-ocean ridge	spreading	subduction
denser rock	molten material	

Sample:

*Molten material spreads as it comes to the surface and becomes mid-ocean ridges. Denser rock is subducted under the less dense molten material.*