

MCAS Questions: Landforms**Reporting Category: Earth and Space Science**

Standard: 12 - Give examples of how the surface of the earth changes due to slow processes such as erosion and weathering, and rapid processes such as landslides, volcanic eruptions, and earthquakes.

1. (2013) While hiking last year, Mike saw a large boulder next to a mountain trail. The boulder had no cracks. While hiking on the trail this year, he saw two large cracks in the boulder. Which of the following **most likely** caused these cracks to form?
 - A. shaking from high winds
 - B. pressure from flowing water
 - C. erosion due to falling rain and snow
 - D. weathering due to freezing and thawing

2. (2011) Which of the following can be caused by weathering?
 - A. cracks forming in a boulder
 - B. rocks melting to form magma
 - C. glaciers forming on a mountainside
 - D. pebbles combining to form a large rock

3. (2009) The picture below shows an island that was formed in an ocean.



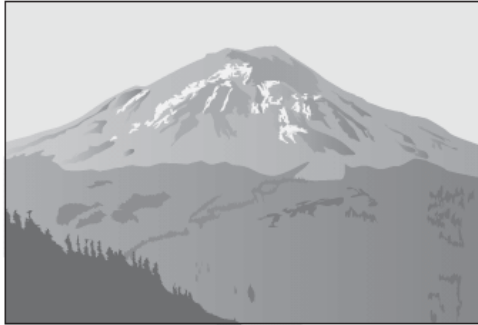
Which of the following **most likely** caused the formation of this island?

- A. wave erosion
- B. sand deposits
- C. wind movement

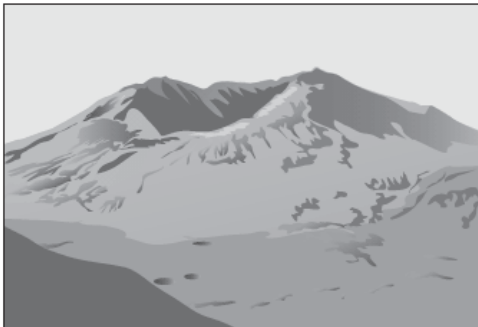
D. volcanic eruptions

4. (2008) The pictures below show the same area before and after an event occurred.

Before Event



After Event



Which of the following events most likely caused the change in this area?

- A.** a flood
- B.** a hurricane
- C.** a volcanic eruption
- D.** a strong earthquake

Open Response Questions

1. (2007) The surface of Earth is always changing. Some natural processes change Earth's surface slowly over time and others change Earth's surface very quickly. The picture below shows an area of Earth's surface that was shaped by natural processes.



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Name and describe **three** natural processes that might have helped to shape this area.

MCAS Questions: Landforms Multiple Choice Answers

1. D
2. A
3. D
4. C

Open Response Answers

Score Point 4

- 1) One ~~was~~ process that might have changed the area is
The shifting tectonic plates coming together and jutting upward to
form the mountain range.
- 2) Another process could be the wind slowly, over a billion years
chipping away at the mountains, and maybe someday causing a landslide.
- 3) A third process could have been a river long ago cutting a
riverbed and someday creating the valley I see.

Score Point 4

A natural process that might of helped shape the area was a volcano by the lava flowing it makes higher mountains. Another might be a landslide by when the rocks falling and other minerals it can make the ground higher and making the mountain flatter on the side. The last process might be earthquakes because earthquakes can form landslides and making the mountain smaller because it losing so much rock and other minerals.

Score Point 3

Three Natural process that could have helped to shape the area could have been is a landslide, a earthquake activity, and weathering that could be three Natural process that could have changed the area of this surface. The earthquake could have changed it by taking rocks down and putting it in another place. The landslide is going to move stuff from place to place. The weathering would smooth the land so it would kind of be smooth.

Score Point 2

The wind blows the sand to create mountains. The rain forms the streams. The ice melts and carries rocks to the bottom of the mountain.

Score Point 1

A glacier might have passed through the area also weathering and erosion might have made this valley

Score Point 0

1. Lever
2. mineral
3. color

thoes are 3 natural process that might have helped to shape this area.