

Name _____

Date _____

Landforms & Bodies of Water

Use the text to answer each question below.

1. A landform is a natural shape or feature of the Earth. A body of water is a large accumulation, or mass, of water on the Earth's surface. Geographers study the physical characteristics of the Earth, like landforms and bodies of water and the humans who live on Earth. Geographers also study how humans interact with their physical environments. You can remember this by thinking about the prefix "geo-," which means "Earth, ground or soil." A geophysicist is another job with "geo-" in its name. If you're thinking that geophysicists also study the Earth, you guessed it! Geophysicists use a type of science called physics to study the features of the Earth and the processes that change it. Geophysicists might study the atmosphere (the layer of gases that surrounds the Earth) or the movement of the oceans or earthquakes. An earthquake is the shaking of the Earth caused by the movement of tectonic plates, huge slabs of rock in the Earth's crust.

Which of these questions might a geographer try to answer?

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| A. How can we accurately represent the rivers and oceans on Earth? | B. How can we model the force of the Sun's gravity on the solar system? |
| C. How can we model and describe the way bridges change over time? | D. Why do some people have red hair? |
2. According to most geologists, land must rise at least 1,000 feet above the surrounding area to be considered a mountain. The highest point of a mountain is called the peak or the summit. Mountains form in different ways. Some mountains are created when tectonic plates crash into each other and push the land up. A plateau is a broad, flat area of land that rises higher than the surrounding land on at least one side. The largest plateau in the world is the Tibetan Plateau in Central Asia. It has an area of about 965,000 square miles and stretches across the countries of Tibet, China and India. Plateaus look very similar to other landforms called mesas and buttes. A mesa is a wide, high landform with steep sides and a flat top. Mesas are smaller than plateaus. A butte is also a high landform with a flat top and steep sides. Buttes are smaller than mesas.

In which of these lists are the landforms in orders from lowest to highest?

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| A. mesa, butte, plateau | B. plateau, butte, mesa |
| C. butte, mesa, plateau | D. plateau, mesa, butte |

3. A valley is low land between mountains, hills or plateaus. Like Yosemite Valley in the photograph, valleys often have rivers or streams flowing through them. But not Death Valley! Death Valley is a desert valley located in Eastern California. It's the lowest, driest place in North America and one of the lowest places on Earth. Death Valley is a rift valley, which means it was formed by tectonic plates moving apart. Other kinds of valleys are formed by the movement of water or ice.

How is Death Valley different from many other valleys?

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| A. Death Valley is not as low as many other valleys. | B. Death Valley does not have a river or stream flowing through it. |
| C. Death Valley was not formed by tectonic plates like other valleys. | D. Death Valley is not between mountains, hills or plateaus. |
4. Glaciers are created when fallen snow compresses, or gets packed together, and turns into a huge mass of ice. Glaciers move very slowly over land. As they move, they pick up and carry away pieces of rock, eroding the land. Glacial erosion can carve out valleys. It can also create depressions in the land, or shallow, sunken pits. If the glacier then melts and fills up the pit, a lake is created. A lake is a body of water that is surrounded by land on all sides. The Great Lakes are five interconnected lakes in the Northeast US on the border between the US and Canada. They contain the largest supply of freshwater in the world. The Great Lakes were formed 20,000 years ago by the movement and melting of an enormous glacier. A river is a large natural stream of flowing water. The source of a river is the place where the river starts. This is usually the highest point in the river. Some rivers begin in melting glaciers high up in the mountains or in lakes. A river's mouth is the place where it "ends," or where it flows into a larger river, lake or ocean.

Which landform or body of water is most likely pictured here?



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| A. a section of the Nile River in Egypt | B. Lake Michigan in Chicago, Illinois |
| C. the mouth of the Mississippi River | D. The Baltoro Glacier in Northern Pakistan |

5. Volcanoes are openings in the Earth's crust that often look a lot like mountains. They allow molten rock, or hot, liquid rock, from inside the Earth, to reach the surface. Volcanoes erupt, spewing out molten rock, ash and gas. Molten rock is called magma when it's beneath the surface of the Earth and then called lava when it comes out during an eruption. Volcanoes aren't only found on land! Many are located underwater on the ocean floor. Islands are formed by underwater volcanoes. As underwater volcanoes erupt over time, layers of lava can pile up and break through the surface of the water, creating islands. This is how the Hawaiian islands in the Pacific Ocean were created.

What is the difference between magma and lava?

- A. Magma is molten rock. Lava is solid rock.
- B. Magma can form islands. Lava can form mountains.
- C. Lava comes from erupting volcanoes. Magma comes from melting islands.
- D. Lava is molten rock above ground. Magma is molten rock below ground.
6. The Strait of Gibraltar is a very narrow waterway that connects the Atlantic Ocean to the Mediterranean Sea. Spain and the territory of Gibraltar lie on one side of the strait, and Morocco lies on the other.

In the map, which letter represents the Strait of Gibraltar?



- A. A
- B. B
- C. C
- D. D