

Physical Geography and Earth Science Facts

World Geography · Practice Test · 8 Questions

1. Which tectonic plate interaction formed the Mariana Trench, the deepest part of the world's oceans?

- A) The Pacific Plate subducting under the Mariana Plate
- B) The Indo-Australian Plate colliding with the Eurasian Plate
- C) The Nazca Plate sliding past the South American Plate
- D) The African Plate diverging from the South American Plate

2. What fundamental physical process causes the Coriolis effect, which deflects prevailing wind patterns?

- A) Earth's axial tilt relative to the sun
- B) Earth's rotation on its axis
- C) Gravitational pull from the Moon
- D) Differential heating between the equator and poles

3. What is the primary driver of thermohaline circulation in the Earth's global ocean conveyor belt?

- A) Tidal forces generated by lunar gravity
- B) Atmospheric wind patterns pushing surface ocean water
- C) Differences in water temperature and salinity levels
- D) Hydrothermal pressure released from deep oceanic rifts

4. Through which geological process do oxbow lakes typically form near meandering rivers?

- A) Tectonic uplift of riverbeds
- B) Glacial scouring during ice ages
- C) Continuous erosion and deposition at meander necks
- D) Volcanic subsidence along river valleys

5. What feature is created when a glacier carves a steep U-shaped valley that is subsequently inundated by seawater?

- A) Fjord
- B) Moraine
- C) Drumlin
- D) Cirque

6. In which atmospheric layer does virtually all of Earth's weather activity take place?

- A) Stratosphere
- B) Mesosphere
- C) Troposphere
- D) Thermosphere

7. The seismic and volcanic zone known as the 'Ring of Fire' surrounds which major oceanic basin?

- A) Atlantic Ocean
- B) Indian Ocean
- C) Pacific Ocean
- D) Arctic Ocean

8. What scientific term describes the precise surface shape that Earth's ocean water would adopt under gravity and rotation alone?

- A) Ellipsoid
- B) Geoid
- C) Oblate spheroid
- D) Topoid