

Earth Science Quantitative Challenge

Earth Science · Practice Test · 10 Questions

1. On what date did the largest recorded earthquake in history, the Valdivia earthquake, occur in Chile?

- A) May 22, 1960
- B) March 27, 1964
- C) December 26, 2004
- D) August 15, 1950

2. What is the approximate depth of the Mohorovicic discontinuity beneath the continental crust?

- A) 5-10 km
- B) 30-50 km
- C) 100-150 km
- D) 200-250 km

3. Who proposed the theory of continental drift in his 1915 book 'The Origin of Continents and Oceans'?

- A) Harry Hess
- B) Beno Gutenberg
- C) Alfred Wegener
- D) Charles Richter

4. The Saffir-Simpson Hurricane Wind Scale is divided into how many categories?

- A) 3
- B) 4
- C) 5
- D) 6

5. What is the value of the solar constant, representing the average amount of solar energy reaching the top of Earth's atmosphere?

- A) 1,361 W/m²
- B) 1,050 W/m²
- C) 980 W/m²
- D) 1,500 W/m²

6. In which year did the eruption of Mount Tambora, the most powerful volcanic eruption in recorded history, occur?

- A) 1783
- B) 1815
- C) 1883
- D) 1902

7. The Earth's inner core has a radius of approximately how many kilometers?

- A) 637 km
- B) 1,220 km
- C) 2,440 km
- D) 3,480 km

8. How many official Earth 'spheres' (e.g., atmosphere, lithosphere) are commonly categorized in traditional physical geography?

- A) 3
- B) 4
- C) 5
- D) 6

9. The Keeling Curve, which tracks atmospheric carbon dioxide levels, began continuous measurements in which year?

- A) 1948
- B) 1958
- C) 1968
- D) 1978

10. What is the approximate percentage of Earth's total water volume that is contained in the oceans?

- A) 92.5%
- B) 95.0%
- C) 96.5%
- D) 98.0%