

# Pioneers of Earth Science

Earth Science · Practice Test · 18 Questions

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**1. Who is credited with producing the first comprehensive geological map of an entire country, published in 1815?**

- A) William Smith
- B) Charles Lyell
- C) James Hutton
- D) Adam Sedgwick

**2. In 1912, Alfred Wegener first proposed the theory of continental drift. What was the name of the supercontinent he theorized existed 200 million years ago?**

- A) Gondwana
- B) Pangaea
- C) Laurasia
- D) Rodinia

**3. Which scientist is credited with inventing the seismograph in 1855, allowing for the first precise recording of earthquake vibrations?**

- A) John Milne
- B) Luigi Palmieri
- C) Giuseppe Mercalli
- D) Charles Richter

**4. What was the first deep-sea drilling vessel, launched in 1968, that provided the definitive proof for the theory of seafloor spreading?**

- A) Glomar Challenger
- B) JOIDES Resolution
- C) Deep Sea Drilling Project I
- D) RV Atlantis

**5. In 1863, which American scientist published the first modern weather map based on telegraphic reports, laying the foundation for synoptic meteorology?**

- A) Cleveland Abbe
- B) Matthew Maury
- C) Cleveland Abbe
- D) Cleveland Abbe

**6. The concept of the 'Mohorovicic discontinuity' was discovered in 1909. What does this boundary represent within the Earth?**

- A) The core-mantle boundary
- B) The lithosphere-asthenosphere boundary
- C) The crust-mantle boundary
- D) The inner-outer core boundary

**7. Who was the first oceanographer to produce a comprehensive bathymetric map of the North Atlantic, published in 1957 with Marie Tharp?**

- A) Bruce Heezen
- B) Robert Ballard
- C) Sylvia Earle
- D) Jacques Cousteau

**8. What is the name of the first satellite launched in 1960 specifically designed to provide global meteorological observations?**

- A) TIROS-1
- B) Nimbus-1
- C) GOES-1
- D) Vanguard 2

**9. In 1963, Fred Vine and Drummond Matthews provided the first physical evidence for plate tectonics by observing what phenomenon on the ocean floor?**

- A) Subduction zones
- B) Magnetic striping
- C) Hydrothermal vents
- D) Turbidity currents

**10. Who authored 'Principles of Geology' (1830), the seminal work that established the doctrine of uniformitarianism?**

- A) James Hutton
- B) Charles Lyell
- C) Georges Cuvier
- D) Louis Agassiz

**11. The first controlled experiment to measure the density of the Earth was conducted in 1798. What is this famous experiment called?**

- A) Cavendish experiment
- B) Eötvös experiment
- C) Foucault pendulum
- D) Michelson-Morley experiment

**12. Which scientist published the first work to systematically classify clouds in 1803, utilizing Latin terminology that is still in use today?**

- A) Luke Howard
- B) René Descartes
- C) John Dalton
- D) Francis Beaufort

**13. The first identified 'hotspot' track, which provided evidence for the movement of tectonic plates over stationary mantle plumes, was identified in which location?**

- A) Iceland
- B) Hawaii
- C) Yellowstone
- D) Galápagos

**14. In 1935, Charles Richter developed the earthquake magnitude scale. What was the primary instrument used to provide the data for his original calculations?**

- A) Wood-Anderson seismograph
- B) Mercalli intensity meter
- C) Galitzin seismometer
- D) Horizontal pendulum

**15. What substance was first identified as a major cause of stratospheric ozone depletion in a 1974 paper by Mario Molina and F. Sherwood Rowland?**

- A) Carbon dioxide
- B) Chlorofluorocarbons
- C) Sulfur dioxide
- D) Methane

**16. Who invented the first thermometer that could be used for meteorological purposes in 1612?**

- A) Galileo Galilei
- B) Daniel Fahrenheit
- C) Anders Celsius
- D) Evangelista Torricelli

**17. The first core sample of the Antarctic ice sheet, which revolutionized paleoclimatology, was retrieved from which station in 1968?**

- A) Vostok Station
- B) Byrd Station
- C) Amundsen-Scott Station
- D) McMurdo Station

**18. Which mineralogical discovery, made by Friedrich Mohs in 1812, provided the first standardized scale of relative mineral hardness?**

- A) Mohs scale
- B) Vickers scale
- C) Rockwell scale
- D) Brinell scale