

Geographical Astronomy and Earth Sciences

Astronomy · Practice Test · 12 Questions

1. Which specific location on Earth experiences the 'Midnight Sun' for the longest continuous duration during the northern summer solstice?

- A) The North Pole
- B) Reykjavík, Iceland
- C) Hammerfest, Norway
- D) Murmansk, Russia

2. The Tropic of Cancer currently corresponds to which specific approximate geographic latitude?

- A) 22.5 degrees North
- B) 23.4 degrees North
- C) 24.1 degrees North
- D) 25.0 degrees North

3. Which desert is home to the ALMA Observatory, chosen for its high altitude and extreme aridity, which minimizes atmospheric water vapor interference?

- A) Sahara Desert
- B) Gobi Desert
- C) Atacama Desert
- D) Kalahari Desert

4. The 'Great Circle' path that passes through the celestial poles and defines the Earth's prime meridian is known as what?

- A) Equator
- B) Ecliptic
- C) Longitude 0
- D) Zenith

5. At which latitude is the sun directly overhead at noon during the March equinox?

- A) 0 degrees
- B) 23.5 degrees North
- C) 23.5 degrees South
- D) 66.5 degrees North

6. Which astronomical phenomenon is directly responsible for the 'geoid' shape of the Earth, deviating from a perfect sphere?

- A) Tidal locking
- B) Centrifugal force from rotation
- C) Magnetic pole reversal
- D) Atmospheric pressure

7. The Mauna Kea Observatory is located on a dormant volcano in which specific US state?

- A) Alaska
- B) California
- C) Hawaii
- D) Arizona

8. Which historical astronomical site in England is aligned with the sunrise on the summer solstice?

- A) Silbury Hill
- B) Stonehenge
- C) Avebury
- D) Old Sarum

9. What is the term for the geographic point on Earth's surface where the sun is directly overhead at solar noon?

- A) Subsolar point
- B) Zenith point
- C) Nadir
- D) Geodetic datum

10. The South Pole Telescope is located in which specific Antarctic region?

- A) Ross Ice Shelf
- B) Amundsen-Scott South Pole Station
- C) Vostok Station
- D) McMurdo Dry Valleys

11. Due to the Earth's axial tilt, which region experiences the 'Polar Night' during the winter solstice?

- A) Equatorial zone
- B) Tropics
- C) Arctic Circle
- D) Temperate zone

12. What is the approximate altitude of the Karman line, which is often used to define the boundary between Earth's atmosphere and outer space?

- A) 50 kilometers
- B) 100 kilometers
- C) 200 kilometers
- D) 500 kilometers