

Scientific Wonders of Exploration

Geography And Earth Science · Answer Key · 10 Questions

1. Which layer of the Earth's atmosphere do mountain climbers primarily traverse while ascending the world's highest peaks?

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

2. What is the primary scientific reason explorers need more oxygen as they climb higher altitudes?

- A) The air pressure decreases**
- B) The temperature increases
- C) Gravity becomes stronger
- D) There is more nitrogen

3. Which ocean contains the Mariana Trench, the deepest part of the world's oceans explored by submersibles?

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

4. What scientific instrument is used by explorers to determine direction based on the Earth's magnetic field?

- A) Barometer
- B) Compass**
- C) Sextant
- D) Thermometer

5. Which continent is scientifically defined as a desert because it receives very little annual precipitation?

- A) Africa
- B) Australia
- C) Antarctica**
- D) South America

6. What do oceanographers use to measure the depth of the ocean floor during exploration missions?

A) Sonar

B) Radar

C) Telescopes

D) Spectroscopy

7. The Great Barrier Reef, a popular site for underwater exploration, is primarily composed of what living organism?

A) Basalt rock

B) Coral polyps

C) Volcanic glass

D) Seaweed

8. Which gas makes up the majority of the Earth's atmosphere, which explorers must account for during deep-sea diving?

A) Oxygen

B) Carbon Dioxide

C) Nitrogen

D) Helium

9. What is the name of the imaginary line that divides the Earth into the Northern and Southern Hemispheres?

A) Prime Meridian

B) Tropic of Cancer

C) Equator

D) Arctic Circle

10. Explorers studying volcanoes focus on the study of which type of rock formed from cooled magma?

A) Igneous

B) Sedimentary

C) Metamorphic

D) Limestone