

Name \_\_\_\_\_

## Exploring Earth: A Comprehensive Guide to Our Planet

### Short Answer Key

1. Earth's atmosphere is primarily composed of nitrogen (about 78%) and oxygen (about 21%). It is essential for life as it provides oxygen for breathing, regulates temperature, and protects us from harmful solar radiation.
2. Mountains are formed when tectonic plates collide, causing immense pressure that uplifts the Earth's crust, creating towering ranges.
3. The ozone layer in the stratosphere protects Earth by absorbing and blocking harmful ultraviolet (UV) radiation from the sun.
4. An example of a famous volcano is Mount Vesuvius in Italy. It is significant because its eruption in AD 79 buried the city of Pompeii, preserving a snapshot of ancient Roman life.
5. Biodiversity is essential because it ensures ecological balance, provides ecosystem services, and offers genetic resources for medicine and agriculture.

