

Name \_\_\_\_\_

## Unraveling Nature's Puzzle: Factors Influencing Biome Distribution

### Open-Ended Response Answer Key

1. Latitude influences temperature variations across different biomes by determining the angle at which sunlight strikes Earth's surface, leading to differences in solar energy absorption and heat distribution.
2. Altitude influences vegetation types and biodiversity in mountainous regions by creating temperature and precipitation gradients, which support a variety of habitats and species adapted to different elevations.
3. Human activities like deforestation, urbanization, and agriculture can alter biome distribution by clearing natural habitats, fragmenting ecosystems, and contributing to climate change, which can lead to shifts in biome boundaries and loss of biodiversity.
4. Changes in climate patterns, such as warming temperatures and altered precipitation regimes, may lead to shifts in biome distribution as vegetation and wildlife respond to changing environmental conditions.

