

**Section A: Tectonic Reasoning**

1. Tectonic plates moving apart, together, or sliding past each other can cause magma to escape (volcanoes) or sudden ground movement (earthquakes)
2. Fold mountains form from colliding plates pushing land upward; volcanic mountains form from repeated eruptions building up layers of material
3. Because it sits along the boundaries of several major tectonic plates, making it a hotspot for volcanic and seismic activity
4. Because ongoing tectonic plate movement continues to push the land upward gradually, year after year
5. Because factors like building standards, population density, and emergency preparedness affect how much damage occurs, not just the earthquake's strength

Section B: Human Impact & Evaluation

1. Benefits include fertile soil and tourism; risks include potential eruptions threatening lives and property
2. Buildings can be designed with flexible foundations or reinforced structures to better withstand shaking
3. Because the exact timing of tectonic plate movement is very difficult to predict precisely, even with modern monitoring
4. Large eruptions can release ash and gases that affect weather patterns and air quality far beyond the immediate area
5. Understanding tectonic risk helps planners avoid building critical infrastructure in the most dangerous locations, or design it to withstand disasters