

Name \_\_\_\_\_

## Answer Key: Energy Transformations

1. When a volcano erupts, it releases energy stored deep within the Earth.
2. The energy transformation during a volcanic eruption involves thermal energy (heat) stored within the Earth's mantle being transformed into kinetic energy as lava and ash explode out of the volcano.
3. The initial form of energy stored within the Earth's mantle is thermal energy.
4. The transformation of thermal energy into kinetic energy results in the violent expulsion of lava, ash, and gases, leading to volcanic eruptions.
5. Safety precautions for living near volcanoes may include monitoring local volcano activity, having evacuation plans in place, and staying informed about potential eruptions through authorities and experts.