

## Volcano Vocabulary (Teacher Notes)

- **Volcano**: A weak spot in the Earth's crust, where magma can erupt onto the surface.
- **Ring of Fire**: A region of convergent plate boundaries surrounding the Pacific Ocean known for frequent and dangerous earthquakes and volcanic eruptions.
- **Hot spot**: An area where a large body of magma rises to the surface causing volcanic activity.
- **Viscosity**: A liquid's resistance to flow. High viscosity = "sticky", low viscosity = "runny".
- **Magma chamber**: A large body of magma underground in the crust.
- **Pyroclastic flow**: A dangerous and quick-moving flow of tephra (volcanic ash, cinders, and lava bombs).
- **Lahar**: A dangerous and quick-moving mudflow consisting of water and volcanic ash.
- **Geothermal activity**: Water heated by an underground magma chamber that creates hot pools, geysers, and other geothermal features.
- **Magma vs Lava**: Magma is molten rock formed deep underground, and lava is magma that has erupted onto the Earth's surface losing all of its mixed-in gases.
- **Pahoehoe vs Aa**: Pahoehoe is low viscosity ("runny") lava that hardens into smooth, ropelike shapes; aa is high viscosity lava ("sticky") that hardens into jagged, blocky shapes.
- **Crater vs Caldera**: A crater is a hole formed by an impact or explosion; a caldera is a hole created by a collapse over an empty magma chamber.
- **Dormant vs Extinct vs Active**: Dormant ("sleeping") volcanoes are not currently erupting, but will in the future. Extinct ("dead") volcanoes will never erupt again. Active ("alive") volcanoes are currently erupting or expected to soon.
- **Shield vs Cinder Cones vs Composite**: Shield volcanoes are low-lying, shield-shaped volcanoes formed by quiet eruptions of lava. Cinder cone volcanoes are small, cone-shaped volcanoes formed by explosive eruptions of tephra (volcanic ash, cinders, and bombs). Composite volcanoes (stratovolcanoes) are large cone-shaped volcanoes formed by both quiet and explosive eruptions.