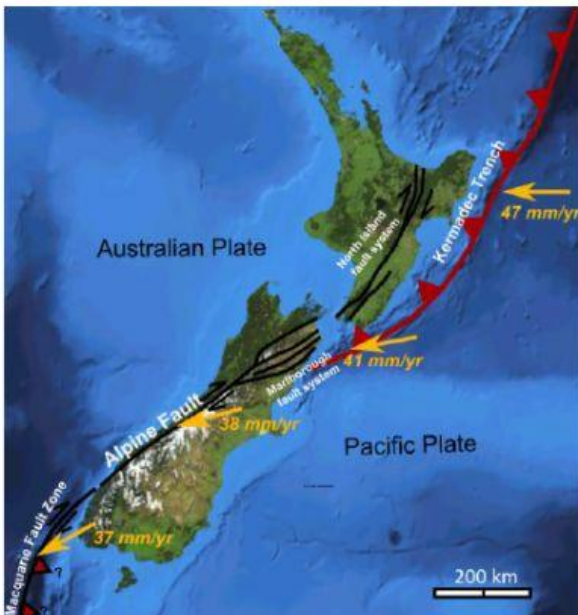
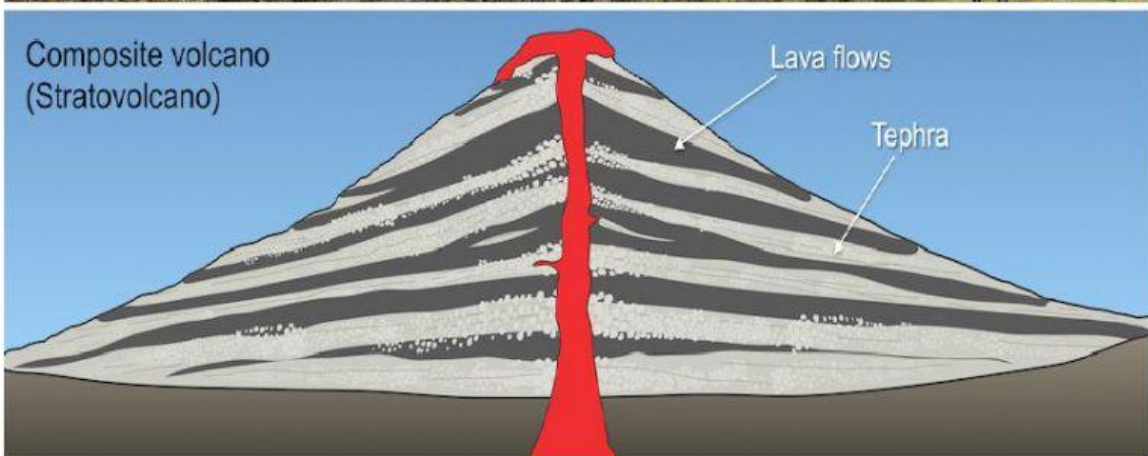


7.3 Volcanic Hot Spots



VOLCANOES

Throat

Flank Vent

Lava Flow

Streams of molten rock from 1,292°F to 2,192°F

1983

Kilauea (Shield volcano), Hawaii
One of the world's most active volcanoes, has been erupting for over 30 years

Ash Cloud
A violent eruption, can be thick enough to block sunlight

Strata Layers

1,300° to 2,400°F
Magma Chamber

The temperature range of most volcanic magma

← = time →



SHIELD

Liquid lava emitted from central vent; large; sometimes has a collapsed caldera



CINDER

Explosive; small; emitted from central vent. Long eruptions may build up a shield volcano



COMPOSITE

More intense lavas, much explosive debris; large; emitted from a central vent



CALDERA

Very large composite volcano that has collapsed after an explosive period

For more Weather Infographics visit wunderground.com/weather-infographics

WEATHER UNDERGROUND

Sources: Wikipedia, USGS.gov

LIVEWORKSHEETS

1. What causes melting at a hotspot?

2. Describe how the Hawaiian hotspot formed a chain of volcanoes.

3. Relative to the Hawaiian hotspot, where in the chain is the oldest volcano? Where is the youngest?

4. What do you think the future for Loihi seamount will be?

1. What is a hotspot?

2. What does a thermal plume allow for?

3. What happens during convection?

4. What carries the volcanoes away from a hotspot?

5. Why does the volcano subside when it moves off the hotspot?