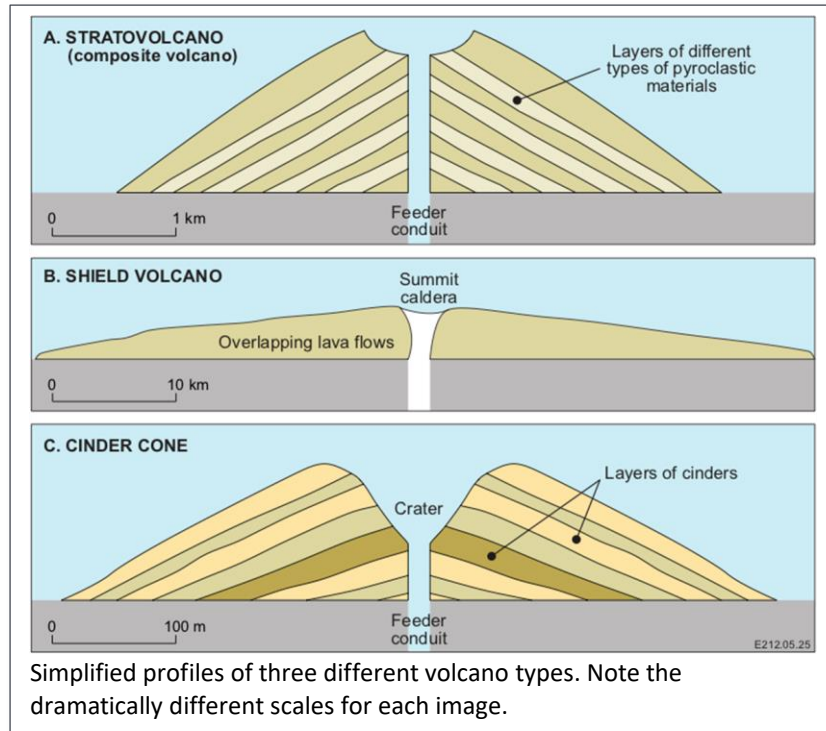




Types of Volcanoes



Stratovolcano:

Stratovolcanoes (also called composite volcanoes) are classic cone-shaped volcanoes formed of alternating ash and lava layers. Famous stratovolcanoes include Mt Fuji (Japan), Mt Pinatubo (Philippines), Mt Taranaki (New Zealand), Mt Vesuvius (Italy), Mt St Helens (USA) and Mt Merapi (Indonesia).

The magma originates from flux melting above subducting plates, so is intermediate in composition with high viscosity and high gas content. This results in explosive eruptions of pyroclastic flow, alternating with thick lava flows when outgassing is efficient and magma volume is smaller.



Mount Fuji is a classic stratovolcano



Mauna Loa is a large shield volcano

Shield Volcano:

Shield volcanoes are formed by extensive basaltic lava flows. The low viscosity lava travels long distances, creating a broad, gently sloping mountain with a shield-like profile. Shield volcanoes are the largest volcanoes in the world both in terms of their diameter and their height. Mauna Loa is the largest of the Hawaiian shield volcanoes, rising over 8 km from the floor of the Pacific Ocean. It is also

one of the world's most active volcanoes. The low gas and silica content result in effusive eruptions and smooth pahoehoe lava flows.

Cinder Cone:

Cinder cones are the smallest and simplest type of volcano, often forming on the flank of both stratovolcanoes and shield volcanoes. They form in a few days or weeks as a vent ejects ash, scoria and cinders. The magma may be mafic or felsic. The common factor is that gas blows lava into the air creating small fragments which pile up.



This cinder cone has formed in an area of subduction zone volcanic activity in northern California.

References:

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