

Volcano: an opening in the earth's crust through which magma, gasses, and ash erupt. The shape of the volcano depends on the type of lava. Most volcanoes occur on plate boundaries.

Ash & Cinder cones are the simplest type of volcano. They are built from particles and blobs of congealed lava ejected from a single vent. As the gas-charged lava is blown violently into the air, it breaks into small fragments that solidify and fall as cinders around the vent to form a circular or oval cone. Most cinder cones have a bowl-shaped crater at the summit and rarely rise more than a thousand feet or so above their surroundings. Cinder cones are numerous in western North America as well as throughout other volcanic terrains of the world. They are very explosive because the lava is very thick and slow flowing. It blocks the vent causing pressure to build up to high levels before it finally blows.

Shield volcanoes built almost entirely of fluid lava flows. Flow after flow pours out in all directions from a central summit vent, or group of vents, building a broad, gently sloping cone of flat, domical shape, with a profile much like that of a warrior's shield. They are built up slowly by the accretion of thousands of highly fluid lava flows called basalt lava that spread widely over great distances, and then cool as thin, gently dipping sheets. These are the least explosive because the lava is so thin and fluid that it does not block the vent and prevents pressure build up.

Composite volcanoes have a conduit system through which magma, from a reservoir deep in the Earth's crust, rises to the surface. The volcano is built up by the accumulation of material erupted through the conduit and increases in size as lava, cinders, ash, etc., are added to its slopes. The lava varies causing it to be explosive one time while the next time it can be gentle flowing.