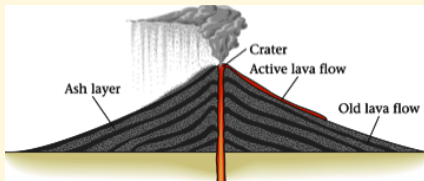


SIO15: Numbers AND TRIVIA - Part 5



shield and strato

the 2 types of volcano. Strato volcanoes are also called composite volcanoes. They consist of alternating layers of pyroclastic debris (ash etc) and lava flows.

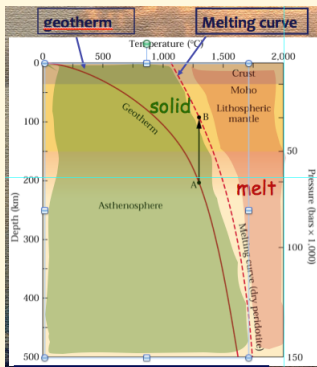


VEI 8

one of only two 'volcanoes' in this category: Yellowstone

geotherm

Earth's internal temperature curve.



melting curve

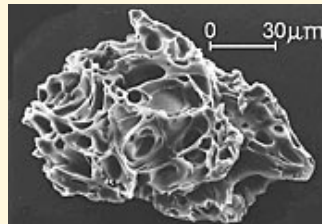
temperature curve as function of depth/pressure when a certain rock

starts to melt. If this rock is to the right of the melting curve, it is molten.



79 AD

first account of a volcanic eruption. Pliny the Younger wrote down what Pliny the Elder saw when Mt. Vesuvius erupted and destroyed the city of Pompeii.



volcanic ash

glassy, unlike ash from wood burning. Can melt on jet engines and clog them causing engine failure.

20

typical number of volcanoes worldwide that are active at any given time.



calderas

larger than a volcano crater. Left behind by large volcanic eruption, either an explosion or when all magma erupted and the magma chamber collapses. Cause tsunamis in the ocean.



1983

when Hawaii's volcano Kilauea started to erupt. It has been erupting ever since making it the longest observed volcanic eruption. It came to rest 4 Sep 2018.



SiO₂

silica. Has impact on viscosity of minerals and rocks. Quartz, Granite and Rhyolite and

high-SiO₂/high viscosity mineral, plutonic and volcanic rock. Olivine, Gabbro and Basalt are the low-viscosity



Mt. St. Helens

most active of the Cascade volcanoes. The 1980 VEI 5 eruption was the first since 1857. Activity started with earthquakes in late March. Monitoring and evacuations followed before its explosion on May 15.

VEI 6

largest eruptions in 20th century: **1912 Katmai, Alaska** followed by the smaller **1991 Pinatubo, Philippines** eruption. The latter claimed 1000 lives despite monitoring and evacuations.