Volcanoes - The power of a major volcanic eruption

Figure 10-2. In some eruptions, the mountaintop collapses into the empty portions of the magma **chamber** beneath the mountain, forming a **caldera**.

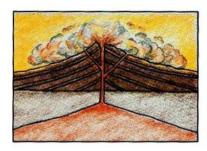






Figure 10-3. **Crater Lake** is located in a caldera that formed after a violent eruption of Mount Mazama. How long ago did that eruption occur?

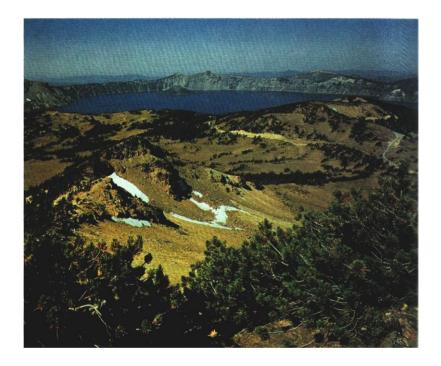


Figure 10-5. The bleak landscape of the **Mount St. Helens** blast area is a grim reminder of the death-dealing nature of volcanoes.



Figure 10-6. These erosion patterns were photographed in the Valley of the 10,000 Smokes, Alaska. How and when was this valley formed?

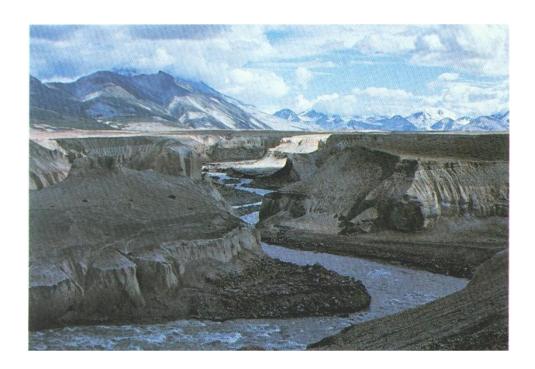


Figure 10-7. (A) Mauna Kea, <u>Hawaii</u>, **shield cone**.

- (B) **Cinder cone** in a volcanic field near Sonora, <u>Mexico</u>.
- (C) Mount Fuji. Japan, composite cone.

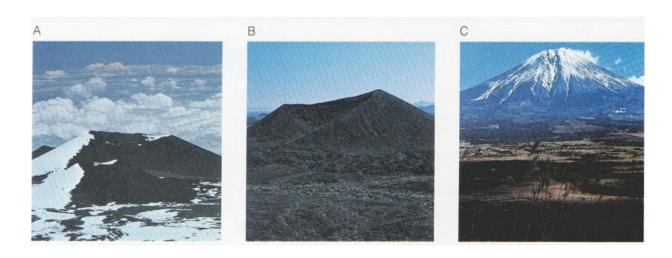


Figure 10-8. Many volcanoes are located around the edge of the Pacific Ocean and form what is called the Circum-Pacific Ring of Fire. Where are many volcanoes of the Atlantic Ocean?

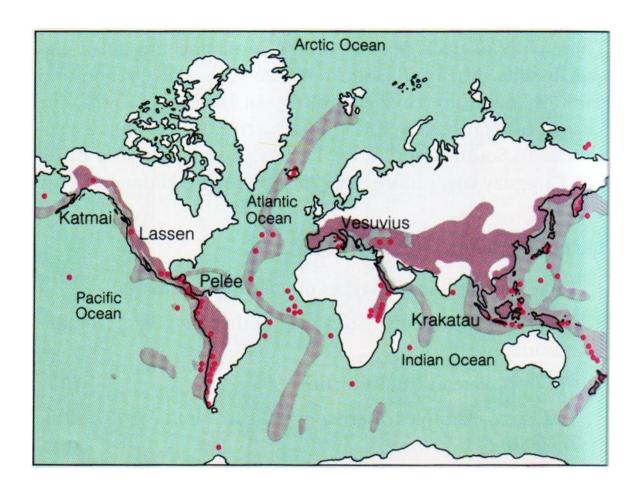


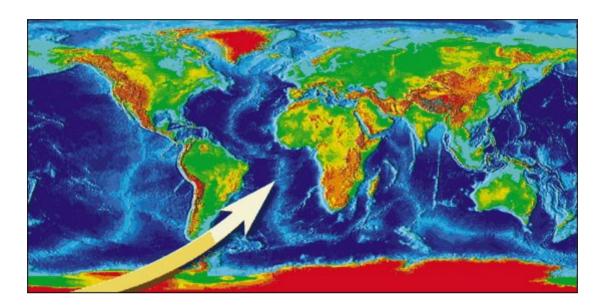
Figure 10-9. <u>Surtsey</u>, off the southern coast of Iceland, is located along the mid-ocean ridge, a site of much volcanic activity.



Fariel, R. - Hinds, R. - Berey, D.: Earth Science, Addison-Wesley 1987

Mid-Ocean Ridges

The Mid-Ocean Ridge system, snaking its way between the continents, is more than 56,000 kilometers long. This series of mountains and valleys marks where the Earth's crustal plates are moving apart.



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