

VOLCANO vs VOLCANIC ISLAND

Key distinction

- **Volcano** = a vent/fissure in Earth's crust where magma, gas, ash erupt to the surface — usually builds up a cone-shaped structure over time
- **Volcanic island** = a landmass that happens to be formed by volcanic activity
 - The volcano = the mechanism that created the land
 - The island = the resulting landmass surrounded by water

Don't mix these up

- A volcano can exist on a continent (Eg: Mount Fuji, Mount Pinatubo) WITHOUT being an island at all
 - A volcanic island is created only when a volcano erupts on the ocean floor and builds up enough material to break the surface of the water
 - So: **every volcanic island involves a volcano, but not every volcano is a volcanic island**
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How a volcanic island forms (the process)

1. Magma erupts at a point on the ocean floor — usually at a **hotspot** (Eg: Hawaii) or a **plate boundary** (Eg: Iceland — divergent; island arcs in the Pacific "Ring of Fire" — convergent)
 2. Repeated eruptions build up layers of lava and volcanic material
 3. Over time, this accumulation grows tall enough to rise above sea level, forming an island
 4. Continued eruptions can enlarge the island
 5. In some cases (Eg: Hawaii), a **chain of islands** forms as a tectonic plate moves over a stationary hotspot
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EXAM TIP

- If a question asks about volcanic islands specifically, examiners usually want the **formation process/mechanism**:
 - hotspot/plate boundary → repeated eruption → accumulation above sea level

- NOT just a definition
- Same principle as other tectonics "explain" questions — need the **mechanism**, not just the label