

Island Arcs

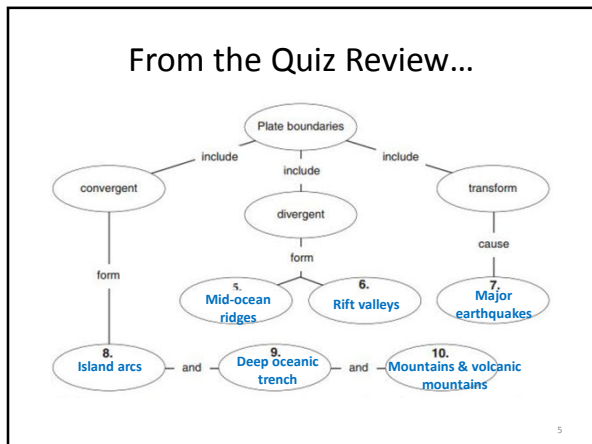
- A subduction zone is also generated when two oceanic plates collide — the older plate is forced under the younger one — and it leads to the formation of chains of volcanic islands known as **island arcs**.

Converging and sinking mantle convection currents pull the two oceanic plates together. One plate is dragged down beneath the other (subduction). Magma feeds a volcano on the overriding plate, which builds up to form an island arc.

Deep Oceanic Trench

- As the oceanic crust sinks, a deep oceanic trench, or valley, is formed at the edge of the continent.

Mountains & Volcanic Mountains

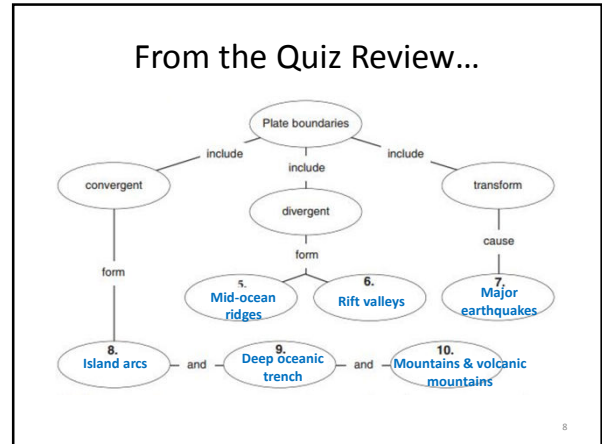


Mid-Ocean Ridges

- Magma oozes up from the mantle to fill in the space between the plates, forming a raised ridge called a mid-ocean ridge.

Rift Valleys

- When two continental plates diverge, a valley-like rift develops.



Major Earthquakes

- As the plates grind past each other, the jagged edges strike each other, catch, and stick, "locking" the plates in place for a time. Because the plates are locked together without moving, a lot of stress builds up at the fault line. This stress is released in quick bursts when the plates suddenly slip into new positions. The sudden movement is what we feel as the shaking and trembling of an **earthquake**.

Quiz Time!

- Don't forget about the three easy blanks at the top of your quiz!
- After you finish with your quiz, you may begin on today's current event article.
- Include the answers to the discussion questions in your notebook! I will read your responses during our next notebook check.
- Finish early? Work on missing work. Progress reports go out tomorrow!

Current Event Article: **Solar Bike Paths Are All The Rage In The Netherlands**