AIR MASSES/PLATE TECTONICS MAP ASSIGNMENT

Requirements: North America and world map.

Part I
Label the air masses that affect North America’s weather on a map of North America.

Part II - CONTINENTAL DRIFT – Label the following on a North America and world maps

A) Areas of Diverging Boundaries: (Crustal Extension)
   1. Sea Floor Spread: Mid-Atlantic Ridge (Iceland), Red Sea, East Pacific Rise, Mid-Indian Ocean Ridge
   2. Rifting on Land: East African Rift

B) Areas of Converging Boundaries: (Compression – Subduction)
   2. Trenches: Peru/Chile, Middle American (Sierra Madres-El Chichon), Aleutian, Japan, Marianas, Philippine, Java
   3. Volcanic Island Arcs: Japan, Aleutians, Marianas, Philippines (Mt. Pinatubo)

C) Areas of Converging Boundaries: Continental Collision
   1. India with Asia – Himalayas (45 mya or 30 to 45 ft./century)
   2. Africa with Eurasian Plate – Alps

D) Transcurrent Fault: San Andreas Fault-right lateral strike slip

E) “Hot Spots”: Mantle Plumes
   1. Hawaiian Islands 22°N, 158°w
   2. French Polynesia 18°S, 150°W
   3. Yellowstone National Park 44°N, 110°W

F) Other Mountain Ranges Caused by Tectonic Processes
   1. Sierra Nevada (California)
   2. Rocky Mountains
   3. Appalachians
   4. Cascades-Mount Saint Helens
   5. Alaskan Range – Mt. Denali
   6. Coast Mountains
   7. Transverse Range