

Name _____
 APES Topic 10 – Geology and Mineral Resources

Date _____
 Mr. Romano

PLATE TECTONICS : A REVIEW and SOME NEW

1. What events occur at or near plate boundaries?

a. earthquakes

b. volcanic activity

c. mountain building events

d. tsunamis - when seismic activity (such as an earthquake) occurs energy is transferred to the water above creating a large sea wave

Ecological Impacts: flooding can lead to

- loss of coastal habitats
- drowning of terrestrial organisms (animals and plants)
- saltwater intrusion into groundwater storage

2. What occurs at mantle hot spots?



- places in Earth's surface that magma rises up from the mantle
- as the crust moves over a hot spot, magma pushes up to form volcanoes - the active volcano in the chain is the one directly over the hot spot

3. How does the theory of plate tectonics fit into environmental science?

a. primary succession – formation of new terrestrial environments

b. understanding biological evolution related to local climate change (finding fossils of animal and plant life in regions that they could not presently survive – evidence of ancient climates and previous locations of tectonic plates)

c. speciation from geographic and reproductive isolation