



Plate Tectonics Essay Test (Ch 5, 13, 14 & 15)

Plate Tectonic Essays are due April 5, 2011

The Essay Test will be April 6, 2011

You will choose 1 essay to write from memory.

I will choose 1 essay to write from memory.

The other 3 will be handed in already written.

- 1. What is plate tectonics? Give examples of plates on Earth. Describe the two layers of the crust and the mantle. Explain how and why the magma moves in convection currents. Explain how the convection currents cause the plates move. (topics #1, 2, & 3 chapter 13)
(Convection Current Lab)**
- 2. Explain three pieces of evidence that leads us to believe many continents were once connected. Describe the theory of continental drift. Give three pieces of evidence that leads us to believe the plates are still moving today. (topics #4, 5, 6 & 7 chapter 13)
(Patterns of Magnetic Polarity Lab)**
- 3. Describe four kinds of plate boundaries on Earth. Name 2 actual plates on Earth that form each of the 4 kinds of plate boundaries. List the visible landforms left by each kind of plate boundary.
(topics #8, 9, 10 & 11 chapter 13)
(topics #5 & 6 chapter 14)
(Plate Boundaries Activity)**
- 4. Describe the color, mineral composition and the magma type of two kinds of volcanic rocks. Explain the type of boundary each volcanic rock most likely came from. Give an example for each of the two kinds of volcanic rock. (topic #4 chapter 5) (topic #1-4 chapter 14)
(Volcanic Rocks Activity)**
- 5. Explain how the speed of a wave depends on the material it passes through. Compare and contrast three kinds of earthquake waves. Explain how they move, what they can move through and how fast they move relative to each other. (topics #1, 2, 3 & 4 chapter 15)**

Plate Tectonic Essays Rubric

#1 (20 pts.)

- define P Tectonics
- 2 examples
- lithosphere
- asthenosphere
- convection currents
- heat/expand
- less dense/rise
- plates apart
- cool/contract
- more dense/sink
- plates together

#2 (20 pts.)

- continental Drift
- coastlines/puzzle
- rocks
- mountains
- fossils
- equakes/ volcanoes
- heat at boundaries
- magnetic polarity
- mid ocean ridges

#3 (20 pts.)

- diverging
- apart
- 2 plate examples
- mid-ocean ridge
- sliding
- past each other
- 2 plate examples
- faults
- collision
- cont & cont
- 2 plate examples
- mountains
- subduction
- ocean & cont
- 2 plate examples
- trenches

#4 (20 pts.)

- mafic
- dark color
- high Fe & Mg
- thin & fast
- diverging
- example
- felsic
- light color
- high silicates
- thick & slow
- subducting
- example

#5 (20 pts.)

- depends on density
- more dense=faster
- P wave
- primary
- compression
- back & forth
- solid/liquid/gas
- fastest
- S wave
- secondary
- side to side
- solids only
- slower than P
- L wave
- surface
- ripples on pond
- slowest