**ES106 Practice Quiz Lab 4 Seafloor Dynamics**

1. Identify the labeled features on the seafloor in the diagram below. Place answers in space provided.



\_\_\_\_\_\_\_\_\_\_\_\_ Feature A

\_\_\_\_\_\_\_\_\_\_\_\_ Feature B

\_\_\_\_\_\_\_\_\_\_\_\_ Feature C

\_\_\_\_\_\_\_\_\_\_\_\_ Feature D

\_\_\_\_\_\_\_\_\_\_\_\_ Feature E (the black box)

\_\_\_\_\_\_\_\_\_\_ 2. If the seafloor is spreading at a rate of 4 cm/yr, and a basalt sample is collected on the seafloor

is located 1500 km perpendicular to the mid-ocean ridge, how old is the rock sample in years?

Show all of your work.

\_\_\_\_\_\_\_\_\_\_ 3. Two continental land masses are separated by 1200 km of ocean basin with an intervening

mid-oceanic ridge system. Geologic dating suggests that the continents were last

amalgamated together 40 million years ago. What is the spreading rate in cm/yr?

Show all of your work.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Matching Q. 4-7 Match the terms on the left with the best, true phrases on the right. Not all choices are used.

\_\_\_\_4. normal polarity A. 175 degrees N.

B. Warm current, west coast of U.S.

\_\_\_ 5. reverse polarity C. mid-ocean ridge

\_\_\_\_ 6. latitude D. Cold current, east coast of U.S.

E. measured E-W of prime meridian

\_\_\_\_ 7. longitude F. compass points north

G. compass points south

H. measured N-S of equator

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_8. True or False: most of the world's continents are located in the southern hemisphere.

\_\_\_\_\_\_\_\_\_ 9. The name of the largest major ocean body is the

\_\_\_\_\_\_\_\_\_ 10. Sea water on average is composed of \_\_\_ o/oo by weight dissolved salts.

\_\_\_\_\_\_\_ 11. The gently sloping submerged surface extending from shoreline toward the deep ocean basin is

referred as the \_\_\_.

\_\_\_\_\_\_\_ 12. Portions of the seafloor that occur in the deep ocean and are essentially horizontal in slope are

referred to as the \_\_\_\_ (two words).

\_\_\_\_\_\_ 13. True or False: seafloor spreading centers are associated with deep ocean trenches

\_\_\_\_\_\_\_\_\_ 14. A submerged volcanic island located on the seafloor is referred to as a \_\_\_\_\_\_\_.