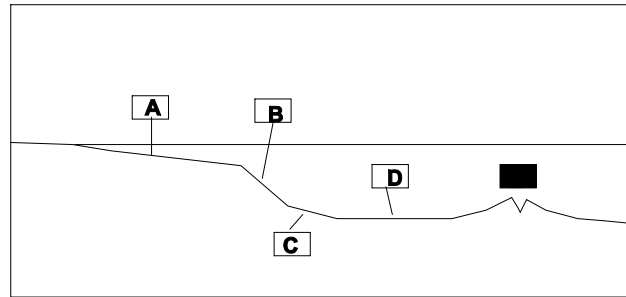


## ES106 Practice Quiz Lab 4 Seafloor Dynamics

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.                   |
| _____ 5. reverse polarity | B. Warm current, west coast of U.S. |
| _____ 6. latitude         | C. mid-ocean ridge                  |
| _____ 7. longitude        | D. Cold current, east coast of U.S. |
|                           | E. measured E-W of prime meridian   |
|                           | 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 \_\_\_\_\_.