

## **Marine Science review for test on atmosphere and currents**

1. What causes the Coriolis effect and how does it affect winds and currents in the northern and southern hemispheres?
2. What are the primary gases in the air we breathe, what are their percentages?
3. What is atmospheric convection and what are the causes and effects of it?
4. What is the primary cause for the seasons we experience on Earth? How do seasons in the northern and southern hemispheres compare?
5. Describe how tropical cyclones form and where they get their power. How do cyclones differ from monsoons?
6. What causes ocean surface currents and what determines their direction of flow?
7. What is a geostrophic gyre; how many are there; what currents are found in them?  
7.b. What is the largest western boundary current and who first described it?
8. What is upwelling and how does it affect productivity in the euphotic zone?
9. What is ENSO and how does El Niño affect the ocean surface temperature in the eastern Pacific?
10. How are thermohaline currents different from surface currents; how do they distribute heat?
11. How would the Earth's climate be different without currents?
12. How are ocean current measurements made? Describe the Lagrangian and Eulerian methods of studying current flow.
13. What is the difference between weather and climate?