Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Monday 11/17/2014 7.1 Oceans – Substitute Assignment

**Directions: Use your EES Textbook PAGES 448-454 to answer the following questions.**

Hand assignment into Class Work box before leaving the classroom.

**Vocabulary:**

|  |  |
| --- | --- |
| Write the Definition | Use it in a sentence OR draw a picture |
| 1. Surface Currents |  |
| 2. Gyres |  |
| 3. Ocean Currents |  |
| 4. Upwelling |  |
| 5. Density Currents |  |

**Reading Comprehension:**

6. How do surface currents develop?

7. What is the Coriolis effect?

8. How does the Coriolis effect influence the direction of the surface currents flowing in the ocean?

9. How do ocean currents affect climate?

10. Why is upwelling important?

11. How are density currents found?

**Drawing Connections:**

12. Why do gyres in the Northern Hemisphere flow in the opposite direction of gyres in the Southern Hemisphere?

13. When seawater freezes, sea salts do not become apart of the ice, leading to an increase in the salinity of the surrounding water. How does this process lead to the formation of a density current?

14. The average surface water temperature off the coast of Ecuador is 21 degrees Celsius where the temperature at the same latitude in Brazil is about 27 degrees Celsius. Explain why there is such a difference in the water temperature between these areas at the same latitude.

**Real Life Application:**

15. On the backside of this paper, write a **five-sentence** summary of the article “Shoes and Toys as Drift Meters” in your textbook page 454.

Use this writing strategy to help you write your summary:

*What, Where, When and Why do you care about this an earth science student learning about ocean currents?*