**Unit 1 Study Guide (Due September 15th)**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

*Scientific Inquiry, Density, Tectonic Plates, Tides, Currents*

Complete the questions on a separate paper.

\*\*Please note, this study guide is just one of many tools to study from. Notes, classwork, and your textbook are all valuable tools to help you prepare for your first science test and show off your science skills ☺

1. Define the following terms
2. Density
3. Salinity
4. Ocean acidification
5. Plate tectonics
6. Divergent boundary
7. Convergent boundary
8. Transverse boundary
9. Trench
10. Continental margin
11. Continental shelf
12. Abyssal plain
13. Conduction
14. Convection
15. Radiation
16. Convection currents
17. Tide
18. Compare and contrast salinity and density.
19. What will happen if two liquids of different densities are poured into the same container?
20. How does density play a role in the ocean water?
21. Would it be easier to float in the dead sea or the ocean? Why?
22. What is ocean acidification?
23. What chemical reaction occurs that changes the ocean pH? How does a change in pH level affect marine organisms?
24. Explain how ocean acidification is affecting pteropods, shellfish, and coral.
25. What does ocean acidification have to do with global warming?
26. What are the 4 large water basins on the Earth?
27. What are the 3 layers of the Earth?
28. How is heat transferred by conduction? Radiation? Convection?
29. Describe how convection currents occur in the Earth’s mantle.
30. What is the theory of plate tectonics and who came up with it?
31. What is sea floor spreading?
32. What are the 3 different types of plate boundaries and how to they differ?
33. What creates the change in tides? How many high tides and low tides occur each day?
34. How does wind blowing along the Southern California coastline bring cool nutrient rich water up from the deep, and how does this colder water affect sea life and ocean water chemistry?
35. What factors make the waters around the Channel Islands able to support such a diversity of life?
36. Who is Sylvia Earle? What is her hope for the ocean? What are hope spots?