

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## ***WHY IS THE OCEAN SALTY?***

The ocean is the eventual depository for most of the Earth's water. Over the eons of land and ocean formation, dissolved minerals from Earth's crust were washed into the ocean. As time went on, water was continuously evaporating from the ocean, leaving behind mineral salts until they reached their present-day concentrations. Salt water is roughly 3.5 percent dissolved mineral salts, much of which is sodium chloride, ordinary table salt. Fresh water contains dissolved mineral salts too, but at concentrations too low for us to taste.

Salt lakes often are found in a region where the rate of evaporation is high and dissolved salts are left behind. These are closed lake systems, because there is no drainage. One famous lake, which is saltier than the ocean, is the Great Salt Lake in the state of Utah. The Dead Sea has a 25 percent salt content, so high that, due to buoyancy it is almost impossible to drown.

1. In the future, what will the salinity of the ocean do? Explain your choice. (increase, decrease, or remain the same)
2. How can the salinity of the ocean give us a clue about the age of the Earth?
3. What does salt do to the density of the ocean?
4. Where does the ocean's salt come from?
5. What is the chemical name for table salt?