

Name _____ Date _____ Period _____

Marine Chemistry **Supplemental Reading I**

Article: *Underwater Weather*

Credit: Robert Monroe, *Weatherwise Magazine*, May/June 2002

1. In spite of the fact scientists have been able to draw significant parallels between atmospheric and oceanic “weather”, study of the oceanic phenomena lags far behind their atmospheric counterparts. Provide two reasons why this is true.
2. How is the term “front” used in oceanography. Provide two reasons why these features are important to marine science.
3. What purpose do storms play in maintaining the balance of life and water chemistry in the oceans?
4. How has the nature of oceanographic instruments changed over the last twenty years and how has this improved our ability to study the world’s oceans?

Article: *The New Ice Age*

Credit: Brad Lemley, Discover magazine, September 2002

1. How could a disruption of the Gulf Stream paradoxically impact the North Atlantic climate and actually make it colder?
2. Where has the scientific insight into the paleoclimate of the region largely come from? Where has this same type of evidence been seen before earlier in the course?
3. Why have findings from this particular study (and those like it) further complicated efforts to tackle climate change in the early 21st century?
4. This article was written in 2002. How has the situation changed since then? Is a deflection of the Gulf Stream still an issue?