Purpose: This blog guided reading worksheet is to help introduce students to how scientists may go about research collecting samples and data while out on a cruise at sea. This particular cruise employed a high school science teacher to go along to help out, learn about the processes and blog about her experiences. go to: http://cce.lternet.edu/blogs/2012/2012/08/01/day-1/

CCE LTER Cruise: Day 1, I’m on a boat!
1: Click on the California Current Ecosystem link- read about about the research site. Why are scientists particularly interested in this specific site? Why is it special?

2: What is the name of the research vessel that they are on? _______________

Which educational institution is the vessel a part of? _______________

3: How much does the ship weigh when it is fully loaded? _______________

(Use the arrow located on the top right hand side of the page to go to the next day)

Day 3, Releasing the MOCNESS
4: On day #3, read about zooplankton are captured by the MOCNESS- summarize the process below:
5: Explain the “vertical migration” of many zooplankton species. Why do they do this?

6: What are phytoplankton?

CCE LTER Cruise: Day 6, SeaSoaring Away…
7: What information is collected by the SeaSoar? What are they trying to find specifically?

CCE LTER Cruise: Day 10, Ahoy E-Front
9: What is the “E-Front”?

10: Why does the sampling need to be conducted at night?

11: What is the epipelagic zone?
12: These samples were taken along the E-Front- *Can you tell where the actual front is located? Draw an arrow where you see the sample changes.*

13: Explain how the **chlorophyll samples** are preserved.

**CCE LTER Cruise: Day 12, Team Oozeki**
14: Where is the **mesopelagic zone**? Why are the critters found here so **special**?

**CCE LTER Cruise: Day 14, Shrunken Cups**
15: *Explain why* styrofoam cups that were attached to the CTD **shrunk** when they were lowered to the depths.
CCE LTER Cruise: Day 19, Trace Metal Group
16: Why is iron so important to phytoplankton?

17: What kind of precautions are taken by the scientists on board to make sure that the water samples are not contaminated by metals on or around the ship?

CCE LTER Cruise: Day 21, Twinkle little Scat
17: How can scientists use “poop” to determine the biomass of an ecosystem? Explain.

18: What is “marine snow”? Explain how it is collected.

CCE LTER Cruise: Day 24, Marine Birds
19: Explain how long-lining is dangerous to marine birds.

20: Describe Fin Whales- what do they look like, what do they eat, why are they not hunted as much as other whales?
CCE LTER Cruise: Day 26, Copepods...
21: What are copepods? What are they related to?

22: Explain the two ways that copepods are studied on this ship.

CCE LTER Cruise: Day 29, Last Day...
23: What is the bow dome? Where is it located?

24: Would you be interested in spending a month at sea? Does a career in oceanography seem interesting?

25: Which part of this blog was most interesting to you? Why?