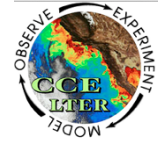


California Current Ecosystem and Long-Term Educational Research- Research Cruise Blog Worksheet



CCE LTER Process Cruise- 2012

Science Blog- *Student* Guided Reading Worksheet

Name: _____

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? _____

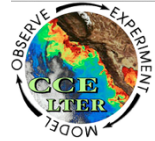
(Use the arrow located on the top right hand side of the page to go to the next day)



Day 3, Releasing the MOCNESS

4: On day #3, read about zooplankton are captured by the MOCNESS- *summarize the process below:*

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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?



8: What is **CTD** stand for?

CCE LTER Cruise: Day 10, Ahoy E- Front

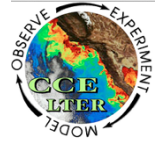
9: What is the “*E- Front*”?



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

11: What is the **epipelagic zone**?

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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.

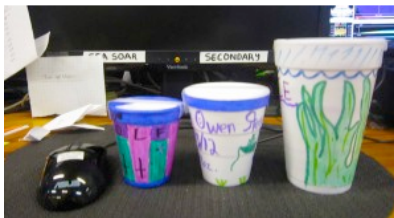
CCE LTER Cruise: Day 12, Team Oozkeki

14: Where is the **mesopelagic zone**? Why are the critters found here so **special**?

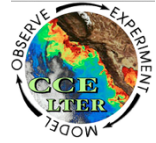


CCE LTER Cruise: Day 14, Shrunken Cups

15: *Explain why* styrofoam cups that were attached to the CTD **shrank** when they were lowered to the depths.



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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.**



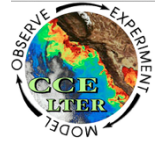
CCE LTER Cruise: Day 24, Marine Birds

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?

California Current Ecosystem and Long-Term Educational Research- Research Cruise Blog Worksheet



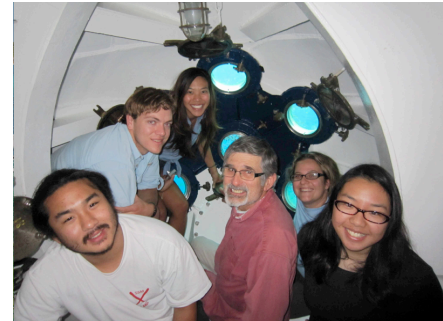
CCE LTER Cruise: Day 26, Copepods...

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*?