

Example of FeMO Websearch Questions

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1. What does FeMO stand for?
2. Where is the observatory located?
3. How do the researchers make their observations? Explain.
4. From what and where do the microbes get their energy to make food?
5. Is this energy pathway part of the carbon cycle? Explain.
6. What is the name given to microbes that make their food without light energy?
7. How much of the ocean floor is a potential energy source for these microbes?
8. What is one explanation for why these microbes were so difficult to detect? (why weren't they discovered long ago?)
9. Are the techniques used in the discovery of the iron oxidizing microbes on Earth possibly useful for discovering life on other planets? Explain
10. What is the estimated biomass of chemosynthetic microbes?
11. How would you modify the biosphere reservoir on the carbon cycle diagram to show these microbes?
12. Where do these microbes get the carbon to make their food?
13. How would you modify the carbon cycle diagram to show this source of carbon to the biomass reservoir? (How would you change the pattern of arrows to show this source of carbon?)

14. After changing one or more arrows in #11, what other changes in arrows would you have to make to bring the carbon budget back into balance?
15. Could these changes account for the Missing Carbon described in the Feb. 2004 National Geographic Magazine article? Explain
16. The changes in the carbon cycle you have describes in questions 12 and 13 constitute a hypothesis. How would you test this hypothesis?
17. Have the FeMO scientists claimed they have found the missing carbon?
18. What is the most interesting thing you have learned viewing the FeMO website?