

Ocean Acidification (National Geographic)

Click on link #24 on the Biology Links page at jmazzabiology.com

Page 1:

- 1) How does CO₂ make ocean water acidic? (2nd paragraph)
- 2) How does CO₂ get into the oceans? Once in the oceans, how does it get deeper into the oceans?

Page 2:

- 3) What is the range of the pH scale? What is the natural pH of seawater?
- 4) If the pH drops by 0.1, what is the percentage by which the water's acidity has increased? By 2100, what is the percent increase in acidity expected to be?
- 5) Can we count on natural processes that counter act acidification to prevent the ocean from acidifying to the level described in the article? Why or why not?
- 6) What are pteropods? How are they affected by the acidity and what problem(s) does this pose for other organisms in the marine communities where they are found?
- 7) What percentage of ocean species spend at least part of their lives in a coral reef system? Why is this of concern?
- 8) How do acidic conditions affect coral? (mention what coral polyps use to make their exoskeleton and how acidity affects this process)

Page 3:

- 9) How could the loss of coral reefs affect biodiversity? Use information from the article as support.
- 10) How are larger fish and marine mammals impacted by ocean acidification? (list as many ways as mentioned in the article)