**Ocean Acidification Webquest: Is There a Problem?**

This WebQuest will guide you as you review information and gain a better understanding of Ocean Acidification. Begin your quest by using the resources listed below to answer the following questions:

**1.** **MBARI video; *Life on the edge: Is ocean acidification a threat to deep-sea life?*** (5½ minutes)

<http://www.youtube.com/watch?v=Wyvc_r_0HgA&feature=plcp&context=C4e44f6aVDvjVQa1PpcFMfS8mKF4LUq6wN2VUN_NgndMvWShLfpLM%3D>

* *Write down five pieces of information that were new to you in bulleted format*

**2.** **Keeling’s Curve**:Go to <http://earthobservatory.nasa.gov/IOTD/view.php?id=5620> Read the information below the graph and study the graph.

* ***The independent variable is \_\_\_\_\_\_\_\_ and the dependent variable is \_\_\_\_\_\_\_\_\_\_ on this graph.***
* *What is Keeling’s Curve?* Answer in full sentences.
* *Describe the curve. What does the graph show?* Answer in full sentences.

**3. Acidic Seas podcast** MBARI: <http://www.kqed.org/a/quest/R808110833> (6 minutes) Listen to the audio podcast from the researchers and answer the following questions in full sentences:
Dr. Jim Barry:

* *What is a question that Dr. Barry is concerned with exploring?*

Dr. Peter Brewer:

* *What experiment is going on deep in the ocean?*
* *How are MBARI scientists keeping some variables in check?*

**4.** **Pteropods: Swimming snails of the sea** <https://www.youtube.com/watch?v=3-40RU3iSkA>

* *Write down 5 pieces of information that were new to you in bulleted format*

**5.** **USGS site.** Go to <http://coastal.er.usgs.gov/ocean-acidification/>

* *Why might polar regions be affected more by ocean acidification than temperate and tropical regions? Answer in full sentences.*

**6.** **USGS postcards.** Go to <http://pubs.usgs.gov/gip/122/pdf/gip122.pdf>

* *Look over the three postcards and then explain the possible impacts of higher CO2 in:*
* *Temperate marine ecosystems*
* *Tropical marine ecosystems*
* *Arctic marine ecosystems*