**Guided Questions Answer Sheet**Answer with 2-3 full sentences

**1. How did you decide to organize your pteropods? What do the spots on the pteropod shells represent?**  
  
In the pteropod populations there were 5 different recognizable patterns of shell spots. Shells with less spots were assumed to be shells with less dissolution. Shells with more spots were assumed to be pteropods with higher levels of dissolution. Shells were organized into piles ranging from low to high dissolution. There were many pteropod with low dissolution, while there were less pteropods in the high dissolution range.

2. **Do you expect the data at the other 2 time periods to look similar to the data you collected at your station?   
 Explain your answer.**

Over time, samples have more pteropods that experience higher levels of dissolution. The 1918 station will have more pteropods with no dissolution, while the 2118 future station will have less pteropods in the no dissolution category and more pteropods in the type 3 category. This I due to decreasing pH.  **3. What time period had the greatest amount of severely affected pteropods? What trends do you see? What do you think shell dissolutions might look like at 2150?**

2118 had the greatest amount of severely affected pteropods, with several in the type 3 category. The type 3 category had more pteropods over time, which means pteropods are dissolving more over time (with decreasing pH). In 2150, we might expect to see even more pteropods with type 3 dissolution.   
  
 **4. Why do you think the rates of shell dissolution may vary at different time periods?**

There are different levels of pH at different time periods, which may be causing pteropod shells to dissolve at different rates. Different time periods, based on the environment, may be exposed to more carbon dioxide.

**5. What would you conclude to be the main cause of pteropod dissolution?**

The main cause of pteropod dissolution is the decrease in ocean pH! The oceans are absorbing more carbon dioxide which is decreasing ocean pH which causes an increase in shell dissolution.