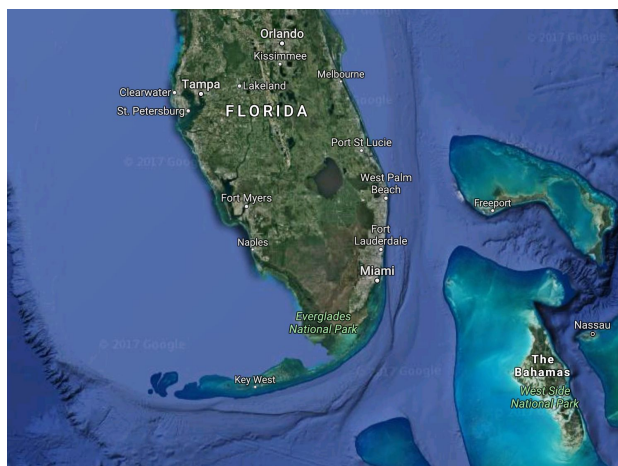

RESEARCH PROJECT: CORAL BLEACHING IN THE FLORIDA KEYS

Your mission: Florida's coral reefs make up the third largest barrier reef ecosystem in the world. These reefs protect the shore and bring in billions of tourist dollars every year. How is sea surface temperature affecting the health of Florida's coral reefs? You are joining a team of scientists who are using data to find out.



Part 1 – Has the water been warm enough to put Florida's corals at risk?

1. Go to the Coral Bleaching activity on the website. Click on [Level 4](#) and scroll down to the activity titled '*Analyzing Bleaching in the Florida Keys.*'
2. On the map, select the light green circle that marks the location of the Florida Keys. Click '*Graph Link.*' The graph shows the latest *Degree Heating Week (DHW)* data for this region. Analyze the graph and answer the questions below:
 - a. What does the y-axis on the left represent? _____
 - b. What time period is represented on this graph? _____
3. Record the date(s), if any, when coral bleaching was expected (above 4 DHW):

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4. Make a prediction: How severe was the risk of bleaching during the time period described above? *Support your prediction by including information about 'how long' and 'how much' DHW values were over 4.*

Part 2 – How much bleaching was actually observed?

5. Was your prediction accurate? Did corals bleach? Did they survive and recover? To find out, you'll need real data and observations from people who monitor coral reef conditions in the Florida Keys. Use the two options below, to begin your search:
- Florida's *Mote Marine Lab* publishes coral [Condition Reports on their website](#). These reports will show you when and where bleaching occurred in the Florida Keys during a given time period. ***See page 2 of the reports.**
 - Search for news articles about bleaching in the Florida Keys by using search terms such as: coral bleaching, Florida Keys, 2015.
6. Record information and specific evidence about bleaching from at least 2 sources.

Source	Date	Bleaching data and observations
Example: Mote Marine Lab, Current Conditions Report #20160601	June 1, 2016	No bleaching was observed during this time period.

Part 3 – Draw a Conclusion: How is sea surface temperature affecting the health of Florida’s coral reefs? Use evidence and data from Parts 1 and 2 to support your conclusion.
