

In-Class Activity 5: El Nino and La Nina**Names:** _____**Directions:** Using your computer or other computing device go to

<http://datainthe classroom.noaa.gov/SitePages/el-nino/level1#.UxEZ9eOwLkI> and answer the questions at the bottom of each page. Fill in the answers to the questions at the bottom of each level below. Then answer the questions based off the maps which you will create on level 5.

Level 1 answers:

1) _____

2) _____

Level 2 answer:

1) _____

Level 3 answers (circle the correct answer):

1) Figure 1 Figure 2

2) Figure 1 Figure 2

3) Figure 1 Figure 2

*(difficult to see, just pick one)***Level 4 answer:**

1) _____

Get Data section:

Level 5: It is really fun to play around with the maps and look at the data. On the “Get Data” page, take some time to get acquainted with the look of these maps. Using the map view, answer the following questions:

1) Make a sea surface temperature map for November of 1997, 1999 and 2003 (any date will do).

Which years do you think represent El Nino, La Nina or “normal”, years? What is your reasoning?

2) Now make a chlorophyll A map (measure of upwelling and phytoplankton) of the same month and years. Do these maps confirm your thoughts about which years are El Nino, La Nina or normal? Imagine you are a fisherman off the coast of South America. How might these events affect your livelihood, if phytoplankton are necessary for fish populations in the ocean? Is there difference between ‘normal’ and ‘La Nina’ years?