

El Nino Online Exploration

Name: _____ Period _____

Task 1: Do a google search for "Duke.edu el nino". Click on the link that takes you to the Duke University site that has a video. The video has 4 parts/chapters, but we'll just use the first two chapters. Start with the introductory chapter.

Background

- High pressure means _____
- Wind flows from _____ pressure to _____ pressure
- Use the terms High and Low pressure to help explain why at the beach there is typically a breeze coming from the ocean toward the land during the day: _____

First Chapter

- Ocean currents are driven by _____ and steered by _____
- In Southern Hemisphere, circulation of ocean surface currents turns in the _____ direction
- When water is moved westward, deeper water _____
- and this is called coastal _____
- Upwelling brings _____ to the surface.
- Peru is famous for its _____
- In general, water below a thermocline (region of sharp temp change at depth), is higher in _____ than water above a thermocline.
- Warmer water in the western Pacific results in low pressure and greater _____.

2nd chapter. View this for 3 minutes only.

- El Nino occurs about every _____ or _____ years.
- An El Nino begins with a change in _____
- Just before El Nino starts, what is the height of the west Pacific sea surface in cm? _____
(as compared to the east Pacific). Notice the slope of the water surface.

Using what you have learned explain:

- The effect of the reversal in wind direction from west to east on the warm Pacific surface water?
- The effect of the reversal in wind direction on the upwelling on Peru's coastline.
- The effect on the Peruvian Anchovy fishery.

Go to serc.carleton.edu/eslabs/fisheries/8_b.html. Use the graph of fish catch data to answer a.

- How much LESS anchovy was caught in 1972 as compared to 1971? _____

Click on the link that says "The Peruvian anchovy industry and El Nino". Scan through the essay and answer:

- Other than El Nino, what else contributed to the decline in anchovy catch totals?
- List or name 3 other effects of an El Nino event: