

Student Link


Lesson Activity for Grade 9

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A

(Environment : General)
Part II: Chasing El Nino

Student Name:

INSTRUCTIONS



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NOVA
A D V E N T U R E

Tracking El Niño

Now you've had a chance to understand what exactly El Nino is once you've completed Part I. In Part II of this series, we'll examine what scientists predicted would happen during the 1997 El Nino occurrence. You'll also get a chance to do your own analysis on what impact El Nino had on Alberta.

1. Starting from the "Grade 9" StudentLink home page click on **Environment**.
2. Then click on "El Nino (advanced)" under the "General" column.
3. Once on the main El Nino page click on "Chasing El Nino" and then "El Nino Scorecard"



The score card page describes what scientists predicted would happen to weather patterns in different parts of the world as a result of El Nino. It also describes the results of what actually happened. Read through the page and then answer the following questions:

What kind of weather did scientists predict for the Northern US and Canada as a result of El Nino?

How severe was the Atlantic hurricane season? Why did scientists want to add Category 6 to Hurricane measurements?

Activity:

Now you'll get the chance to compare actual weather results to see if in fact the 1997 El Nino made any difference at all. We'll use temperature and precipitation data for Calgary Alberta in this exercise on the next page.

Student Name: _____

In your Internet Explorer Internet bar, type in the address below exactly as you see it:

http://climate.weatheroffice.ec.gc.ca/climateData/monthlydata_e.html?timeframe=3&Prov=AB&StationID=2205&Year=1997&Month=1&Day=23

It should bring you to the Environment Canada Weather Almanac tool and display weather data for Calgary for 1997:

CALGARY INT'L A ALBERTA														
Latitude: 51° 6' N			Longitude: 114° 1' W			Elevation: 1084.10 m								
Climate ID: 3031093			WMO ID: 71877			TC ID: YYC								
Previous Year		1997		Go		Next Year								
Monthly Data Report for 1997														
Month	Mean Max Temp °C	Mean Min Temp °C	Extr Max Temp °C	Extr Min Temp °C	Total Rain mm	Total Snow cm	Total Precip mm	Snow Grnd Last Day cm	Dir of Max Gust 10's Deg	Spd of Max Gust km/h				
Jan	-5.7	-12.5	-19.2	10.2	-39.7	T	35.0	18.5	9	25	102			
Feb	2.6	-2.8	-8.2	13.0	-14.8	T	5.6	3.7	2	278	618			
Mar	1.9	-4.0	-9.9	17.8	-26.9	T	30.2	17.1	0	26	78			
Apr	9.4	2.2	-5.0	21.8	-13.8	9.0	5.9	12.6	0	34	89			
May	15.8	9.3	2.7	27.18	-2.6	73.7	31.8	100.7	0	35	95			
Jun	19.3	13.8	8.2	23.0	2.8	138.4	0.0	138.4	0	26	63			
Jul	23.4	16.0	8.6	29.9	2.7	16.9	0.0	16.9	0	218	635			
Aug	23.6E	15.9E	8.1E	33.9E	2.8E	57.8	0.0	57.8	0	23	78			
Sep	20.9	13.1	5.3	29.0	-1.9	36.6	1.4	37.8	0	28	69			
Oct	10.7	4.7	-1.2	23.6	-8.1	0.8	17.2	14.8	0	30	74			
Nov	5.3	-1.5	-8.4	16.3	-14.2	T	1.4	0.6	0	27	82			
Dec	3.6	-2.6	-8.7	14.6	-20.7	T	12.0	6.3	T	24	85			
Sum							333.2	140.5	425.2					
Avg	10.9E	4.3E	-2.3E											
Xtrm			33.9E	-39.7						24	102			

In the spaces provided to the right, enter in the “**Mean Temp**” (Average Temperature) and “**Total Precip**” (Total Precipitation) data for each year since 1997 (1998, 1999, 2000, etc.). 1997 has already been completed for you.

	Total Precip mm	Mean Temp °C
1997	425.2	4.3E
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		

Compare the years of Total Precip to each other. Which year is the greatest? The smallest? Where does 1997 fit in?

Is the Mean Temp for 1997, 4.3 degrees, high or low when compared with the other years?

Overall, what does this weather data tell us about the effects El Nino had on Calgary Alberta?