ESSAY PROMPT: SAN DIEGO CLIMATE

As a review of the second and third sections of the course you will now synthesize the material learned to produce a complete essay explaining the climate we experience in the city of San Diego (don't worry about changes in elevation moving inland, <u>focus only on downtown</u> <u>San Diego</u>). You should refer to all of the variables covered throughout class and <u>progress</u> through the topic in a logical, sequential, step-by-step manner.

The concepts covered should include some of the 6 climate controls discussed in class:

✓ Insolation

✓ Topography

✓ Air mass movements

✓ Ocean Currents

✓ Cyclone belts

✓ Global Pressure distribution

Some of these variables will be more important than others and thus will require more space; you should be explaining each of these concepts as they <u>specifically relate to the Mediterranean Climate of coastal San Diego</u> (i.e. what does annual insolation in San Diego look like and why, how is it related to solar declination and latitude, etc.). You should "build" these variables together so that by the end of the paper you've demonstrated a clear understanding of San Diego climate; remember this means not only <u>annual averages</u> but <u>ANNUAL</u> VARIATIONS as well.

Your paper will be graded based upon your full explanation of the individual concepts and overall explanation as well as grammar, syntax, and organization. It must be 2 pages in length; standard formatting applies (double spaced, 12 point font, one inch margins).

DISTRIBUTION

TOTAL	20 points	100%
Grammar and Syntax	4 points	20%
Organization and Development	6 points	30%
Explanation of Concepts	10 points	50%

FOR A DETAILED ACCOUNT OF EXPECTATIONS AND ASSESSMENT SEE THE RUBRIC ON THE NEXT PAGE

GRADING RUBRIC

	UNACCEPTABLE	ACCEPTABLE	ABOVE AVERAGE
USE AND EXPLANATION OF CONCEPTS	Not all controls mentioned; controls are not fully explained; many inaccuracies or lack of integration	Controls are explained but not specifically for SD; controls aren't related to regional temperature and moisture	All controls are fully explained and key ones clearly illustrate SD average annual temperatures and moisture and annual variations
ORGANIZATION and DEVELOPMENT	Unorganized; no structure; ideas do not build to/ culminate explanation of SD climate	Some connections between ideas and topic explained sufficiently overall	Controls progress in a step by step well developed manner culminating in a complete "big picture" as well as well explained individual parts.
GRAMMAR and SYNTAX	4 or more errors; paper is confusing or unreadable	1-3 errors including spelling, grammar or syntax	No errors; no wording issues; no confusion

^{*}Plagiarism of any sort will result in an automatic zero

HINT: a good complete scientific paper will explain things in terms of cause and effect and thus should be using indicator words such as those listed below (among others)

- √ "as a result of"
- √ "which explains why"
- √ "which leads to"
- ✓ "causes..."

- √ "consequently"
- √ "therefore"
- ✓ "due to"

A very basic potential outline to help organize the paper and fully explain the climate of San Diego, start here and explain each to build a full paper.

OUTLINE

I. Introduction

- A. Climate
 - i.) Definitions
 - ii.) Variables
- B. Our **Mediterranean climate** characteristics

Very simple, brief short one paragraph introduction

II. Temperature

- A. Latitude
 - i.) Solar Declination
 - 1. Sun angle
 - 2. Day length
 - ii.) Seasonal variation
- B. Coastal influence

This section builds upon and is very similar to the explanations from your first essay.

Summarize that and build upon the knowledge you've already organized!

III. Moisture

- A. Generalized climate position
 - i.) Dry sub-tropical climate belt
 - 1. Causes of aridity

Start with a simple <u>explanation (causes)</u> of this broader regional climate type.
Then below explain the slight variation in San Diego

- B. Summer
 - i.) Pressure influence
 - 1. Hawaiian High
 - a) Results
- C. Winter
 - i.) Changing pressure
 - 1. Winter precipitation influences
 - a) Results

Use your explanation of shifting global pressure belts to <u>explain why rainfall</u> varies seasonally in SD

IV. Conclusion

A. Quick wrap up

Now put it all together to explain the averages and variations for both temp. and moisture