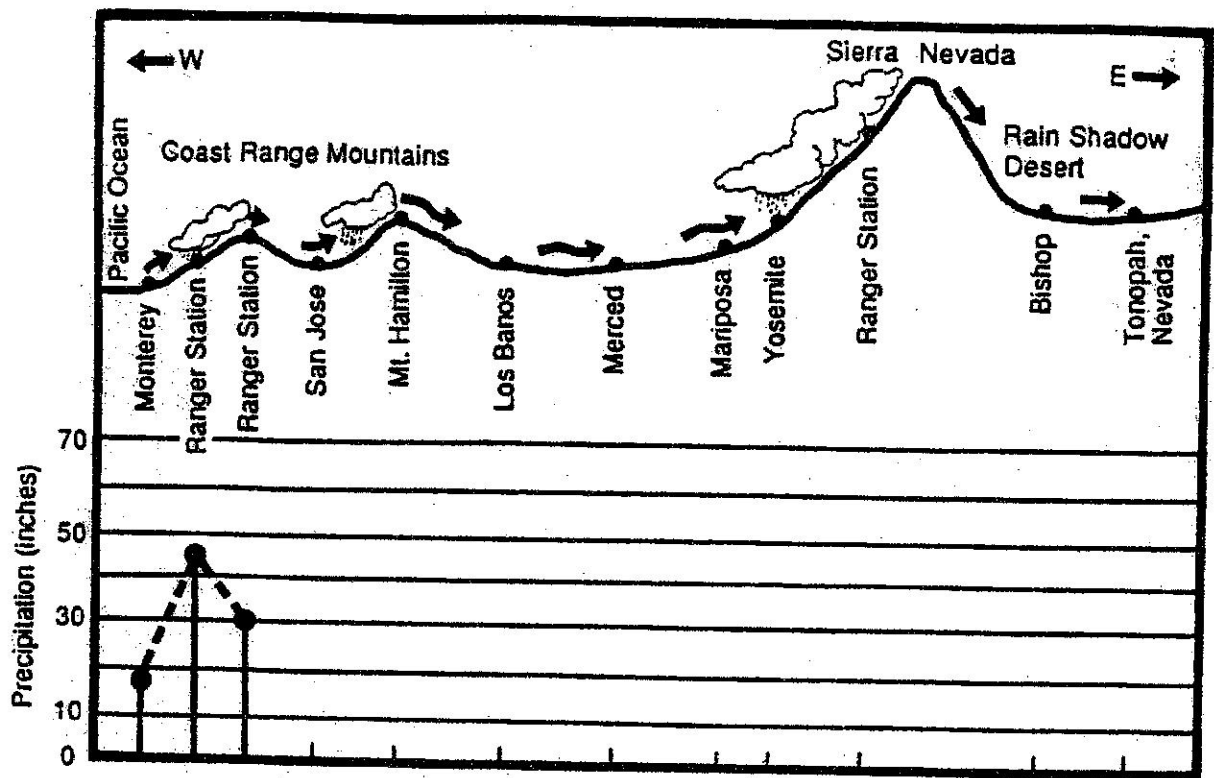


NAME _____

UP MOUNTAINS AND DOWN INTO VALLEYS



Graph the yearly precipitation averages for this cross section of California, using the rainfall averages below. The first three points have already been done for you.

Annual Precipitation Averages

- San Jose: 13 inches
- Mt. Hamilton: 25 inches
- Los Banos: 9 inches
- Merced: 12 inches
- Mariposa: 30 inches
- Yosemite: 38 inches
- Ranger station: 55 inches
- Bishop: 6 inches
- Tonopah, Nevada: 8 inches

UP MOUNTAINS AND DOWN VALLEYS

After completing the precipitation graph for the cross-section of California, answer the following questions. Some can be answered in just a few words; others require you to write longer, more detailed explanations.

1. In general, is the air more humid at Monterey or at Merced? Why?
2. Why do Bishop and Tonopah have such low amounts of precipitation?
3. What is a rain shadow? Explain details of what makes it happen.
4. How many peaks are on the graph you drew? What causes them to be where they are?
5. Moisture is condensed out of the air twice as it blows across the coast ranges, making the valley dry. But there is still lots of rain in the Sierras! Why does it rain so much in Yosemite, but not in Merced and Mariposa?