## Climate Systems - Which Location Is Best For Me? Student Worksheet #1: Climate

## Name:

You will need the following materials for this exercise: United States Map of Cities & States (you might find this in your Social Studies book), internet access or copies of the NOAA maps from your teacher.

**Part 1:** Did you know that the climates of the world are divided into six major categories? Do you know what the categories are and where they are located? Go to this NOAA (National Oceanic and Atmospheric Agency) Web site <a href="http://www.srh.noaa.gov/jetstream/global/climate.htm">http://www.srh.noaa.gov/jetstream/global/climate.htm</a> to complete the chart below: (the first one has been done for you)

| CATEGORY & NAME                          | LATITUDE              | CLIMATE FEATURE                                      |  |  |  |
|--|-----------------------|--|--|--|--|
| A: Tropical                              | 15°-25°               | Average temperatures=64°F Annual precipitation=59"   |  |  |  |
| B:                                       |                       |  |  |  |  |
| C:                                       |                       |  |  |  |  |
| D:                                       |                       |  |  |  |  |
| E:                                       |                       |  |  |  |  |
| Н:                                       |                       |  |  |  |  |
| Use the climate map on this we MY STATE: |                       | e state you live in and record the climate category: |  |  |  |
| MY CLIMATE CATEGORY:                     |                       |  |  |  |  |
| Find three states that have diffe        | erent climates an     | d record below:                                      |  |  |  |
| TATE:CLIMATE CATEGORY:                   |                       |  |  |  |  |
| STATE:CLIMATE CATEGORY:                  |                       |  |  |  |  |
| STATE:                                   | TE: CLIMATE CATEGORY: |  |  |  |  |

## Part 2:

- 1. Go to: <a href="http://www.ncdc.noaa.gov/img/about/cdrom/climatls1/info/temp.gif">http://www.ncdc.noaa.gov/img/about/cdrom/climatls1/info/temp.gif</a> to find the Annual Mean Daily Temperatures on the data chart.
- 2. Next, Go to: <a href="http://www.ncdc.noaa.gov/img/about/cdrom/climatls1/info/prec.gif">http://www.ncdc.noaa.gov/img/about/cdrom/climatls1/info/prec.gif</a> to find the Annual Mean Total Precipitation for the cities. Record the Annual Mean Total Precipitation on the data chart.
- 3. When you have recorded the temperature and precipitation for each city, think about which city you would like to visit and rate each city according to your preference.

| City                      | Annual Mean<br>Daily<br>Temperature | Annual Mean<br>Total<br>Precipitation | Rating<br>#1 Choice, #2 Choice<br>#3 Choice, #4 Choice |
|---------------------------|-------------------------------------|---------------------------------------|--|
| Your City, State:         |                                     |                                       |  |
| Galveston, Texas          |                                     |                                       |  |
| Burlington, Vermont       |                                     |                                       |  |
| San Francisco, California |                                     |                                       |  |
| Miami, Florida            |                                     |                                       |  |

## Climate Systems - Which Location Is Best For Me? Student Worksheet #2: Climate

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You will need the climate data sheets from Worksheet #1 to complete this task.

**Challenge:** You are employed as a climatologist for the National Oceanic and Atmospheric Agency (NOAA) in your city. Your role is to work with your team to set up weather stations that record the daily weather for your region throughout the year and compile annual climate data reports. Your supervisor has just notified you that your team is being transferred from your current city to one of these cities:

- ♦ Galveston, Texas
- ♦ Burlington, Vermont
- ♦ San Francisco, California
- ♦ Miami, Florida

| <b>Part 1:</b> Using the temperature and precipitation data from the "What's The Climate?" table, create a graph that illustrates the data: |
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|   |

**Part 2:** Your team must now decide which city you will relocate to first, second, third, and fourth. Your length of stay in each location is approximately two years. Using the graph above, write a detailed report for your supervisor stating your choices and provide detailed explanations to support your decision.