WHAT'S THE CLIMATE?   **Student Worksheet #1: Climate**

You will need the following materials for this exercise: United States Map of Cities & States (you might find this in your Social Studies book) and 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? Read the printout from this NOAA (National Oceanic and Atmospheric Agency) site http://www.srh.noaa.gov/jetstream/global/climate.htm 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: dry climates	20°-35°	dry climates, hot 70°F or higher, 5-12 inches of rain
C: Subtropical	30°-50°	55-60° 50-70 inches of rain
D: Continental	30°-50° to poles	in the sumer is 45-50°
E: Polar	North south poles	highest is 50°F Percipitation=30-40
H: highlands	mountainous areas	climates based on elevation

Use the climate map on this webpage to find the state you live in and record the climate category:

MY STATE: Florida

MY CLIMATE CATEGORY: ~~Snrotanopiant~~ Subtropical

Find three states that have different climates and record below:

STATE: ~~California~~ Washington CLIMATE CATEGORY: polar

STATE: Texas CLIMATE CATEGORY: dry climates

STATE: Vermont CLIMATE CATEGORY: highlands

Part 2:

1. Look at the printed image from:
   http://www.ncdc.noaa.gov/img/about/cdrom/climatls1/info/temp.gif to find the
   Annual Mean Daily Temperature for the cities in the chart below. Record the
   Annual Mean Daily Temperatures on the data chart.

2. Look at the printed image from:
   http://www.ncdc.noaa.gov/img/about/cdrom/climatls1/info/prec.gif 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 Daily Temperature	Annual Mean Total Precipitation	Rating #1 Choice #2 Choice #3 Choice #4 Choice
Your City, State:	65-70°	50-70	
Galveston, Texas	70°	20-30	1
Burlington, Vermont	32°-40°	30-40	3
San Francisco, California	55°-60°	20-30	4
Miami, Florida	70°	70-100	2

THE CLIMATE CHALLENGE!   **Student Worksheet #2: Climate**

You will need the climate data sheets from Worksheet #1, "What's The Climate?" 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

Part 1: Using the temperature and precipitation data from the "What's The Climate?" table, create a graph that illustrates the data. You may decide what type of graph to use, but it must show the mean temperature and precipitation for the listed cities above.
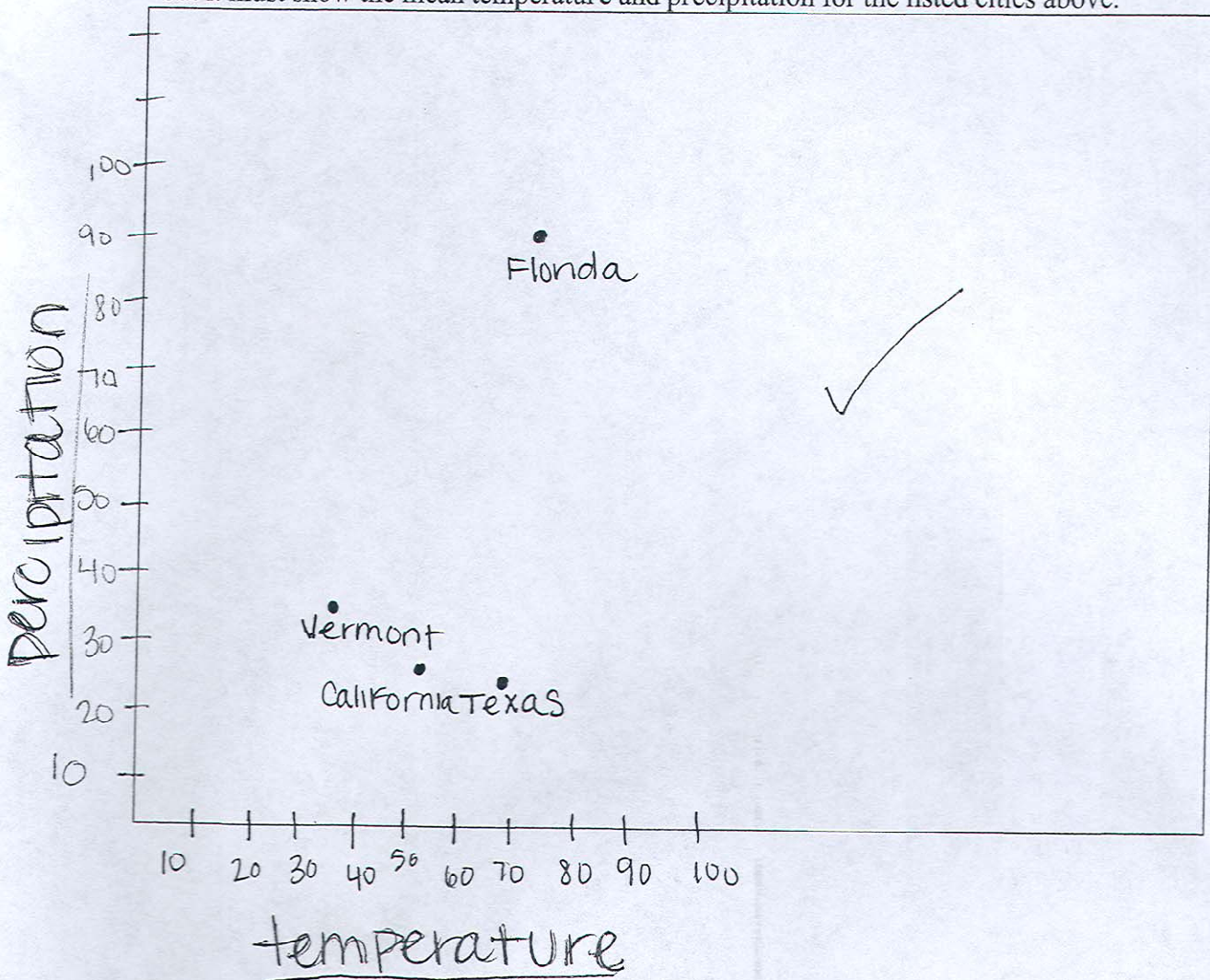
Part 2: Your team must now decide which city you will relocate to first, second, third, and fourth. Your length of stay in each location is approximately two years. Using the graph above, write a detailed report for your supervisor stating your choices and provide detailed explanations to support your decision. There is no right answer for this, just explain your reasoning and you will be okay.

The first city that we decided would be best to relocate at would be Burlington, Vermont. We choose vermont first because in the winter the temperature is below freezing, but the snow makes it worth while, Also the summers are not over bearingly hot. Our second choice to move to would be San Francisco, the reason who we choose San francisco was the fact that they do not get a it have a high average rain fall rate, and it has a mild average temperature. The third city we choose to move to was Galveston, because Galveston also has a low rain fall rate and mild winters. We choose miami last for the reason that it gets gets much too hot in the summer, and the average rain fall rate is much higher than the previous three cities.