

Name:	Date:	Hour:
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Part 1: Internet Search and Data Tables

Work with a partner to use the internet to gather weather and climate data for your city (Independence, MO) as well as another city of your choice located anywhere in the **United States**. Then, use the data tables to record your weather and climate findings.

1. Your City: Independence, MO

- 1. Go to the Weather Underground site. http://english.wunderground.com/
- 2. Enter **Independence**, **MO** in the "Fast Forecast" box which is in the upper left hand corner and click the return button on your keyboard. If the exact location is not in the database then select the next closest city or town.
- 3. Locate the current weather conditions in the center of the page and write the time the conditions were last updated, the current temperature, wind, air pressure, etc. in the Current Weather Conditions data table.
- 4. Scroll down to "History" below the current conditions and click on the "Almanac for Yesterday March 11" link.
- 5. Record the "Mean Temperature" in the average temperature column for your Independence, MO in the Temperature for the last seven days Data Table.
- 6. Click the "Previous Day" link in the top left corner and write the mean temperature in the 2 days ago column.
- 7. Repeat until you complete for the seven days.
- 8. After you've entered the data, click the back button.

2. Pick another city in the U.S. to search.

- 1. Return to the <u>Weather Underground</u> site and enter the name of whatever city you choose to research in the "Fast Forecast" window.
- 2. Repeat the steps above and enter the corresponding information into both Data tables.
- 3. After you've entered the data, click the back button.

3. How to find Climate Data:

- 1. Go to usclimatedata.com and enter Independence, MO into the search bar.
- 2. Record the average annual temperature, the average annual rainfall, and the average annual snowfall (located on right side of page).
- 3. Record the average high and low temperature for each month as well as the average amount of precipitation each month (rainfall+snowfall) found on the left side of the page.

(Use the data tables on the next page to record your **weather** findings.)

A.	Current	Weather	Conditions:

	Independence, MO	
Latitude, Longitude:	Elev 922 ft 39.11 °N, 94.38 °W	
Time Conditions last updated:		
Temperature:	(∘F)	(∘F)
Sky Conditions:		
Wind Direction:		
Wind Speed:	mph	
Precipitation Type:		
Precipitation Amount:	Inches	Inches

B. Temperature for the last seven days

City:	7 days ago	6 days ago	5 days ago	4 days ago	3 days ago	2 days ago	Yesterday
Independence, MO (°F)							
(∘F)							

C. Climate for Independence, MO

Avg. Annual Temperature:

Avg. Annual Rainfall:

Avg. Annual Snowfall:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Avg. High Temp.												
(∘F)												
Avg. Low Temp.												
Avg. Precipitation												
(inches)												

^{1.} Part 2: Analyze the Data

Your chosen location vs. Independence, MO:

 Complete the bar graph comparing the temperature in Independence, MO with the city you chose.

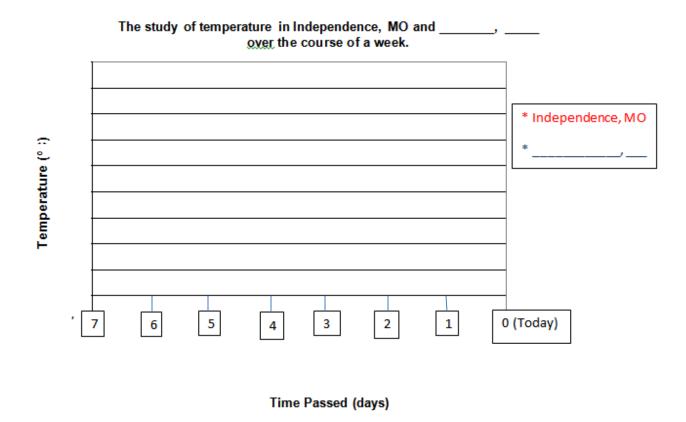
emperature (°)

The Study of Location on Temperature

Independence, MO	

Location (City, State)

- 2. **Temperature for the last seven days:** Analyze the changes in temperature for the last week and compare the two cities.
 - 1. Make a line graph comparing the temperature from your city and Independence, MO for the last seven days vs. time. It's recommended to use two different colors for each of your graphs.



Part 3: Reading Your Results Use your data tables and the graphs you created to help answer the following questions. Record your answers on a separate piece of paper.

Weather Questions:

- 1. For the city you picked, did the temperature go up, down, or stay the same over the past week?
- 2. For Independence, MO, did the temperature go up, down, or stay the same over the past week?
- 3. What were some similarities and differences between Independence's temperature and precipitation and the other city's temperature and precipitation you chose to research?

Climate Questions: Independence, MO

- 1. Which month has the highest average temperature? The lowest?
- 2. Which month has the highest average precipitation? The lowest?
- 3. What was the average temperature for the year?

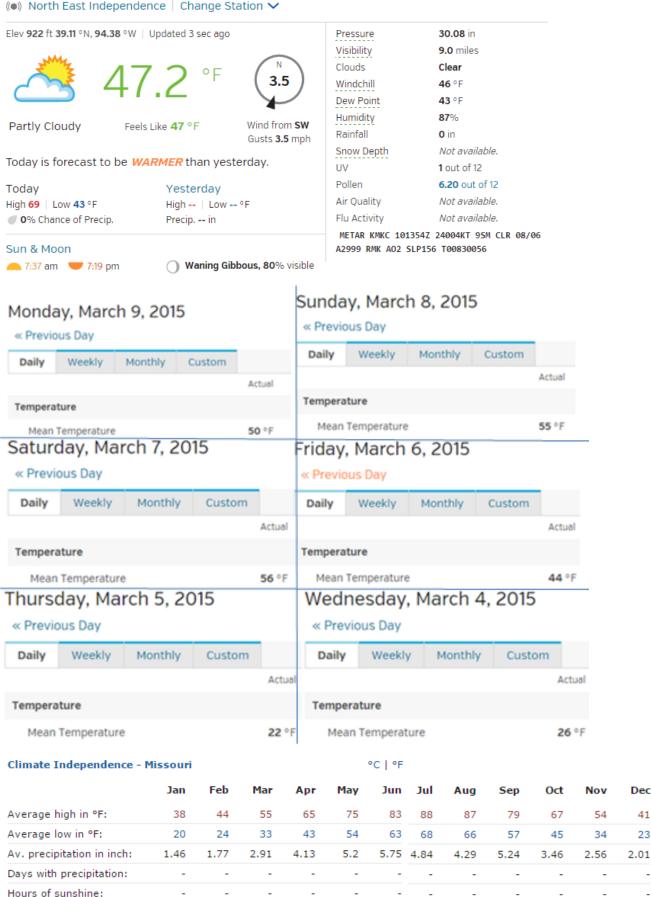
Weather Vs. Climate:

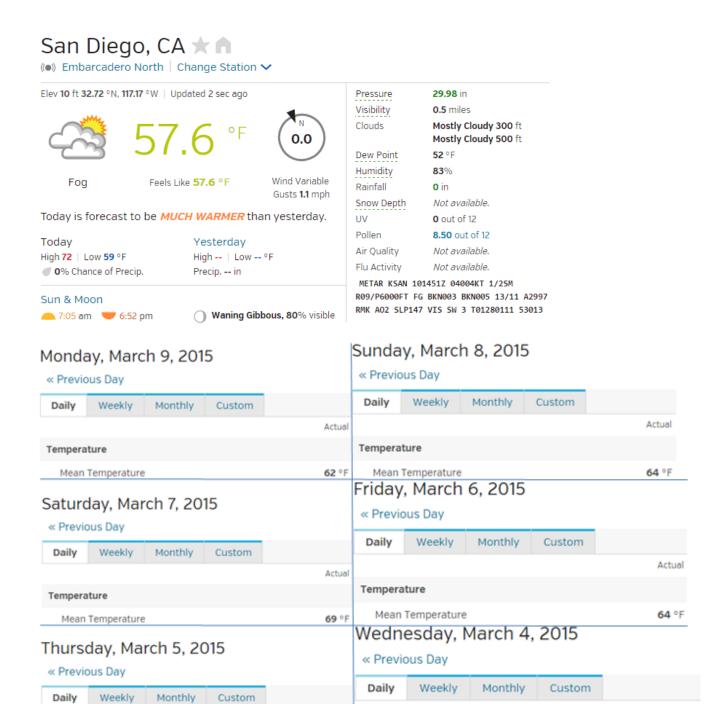
- 1. What are the two most important things to consider when looking at the weather? (page 108)
- 2. What are the two main factors scientists use when describing the climate of an area? (page 108)

Independence, MO 🖈 🖍

Average snowfall in inch:

(North East Independence | Change Station >





Actual

63 °F

Temperature

Mean Temperature

Temperature

Mean Temperature

Actual

60 °F