## Cornpare Tilt, Daylight, and Temperature

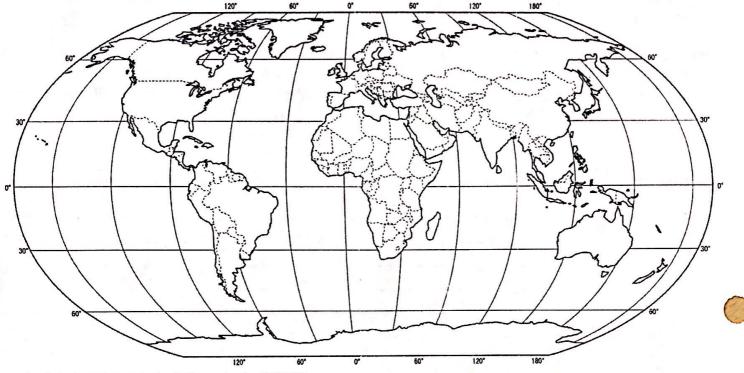
Questions: Does the amount of daylight have an effect on the average temperature of an area? Is

the temperature affected by the latitude of the area which makes the sun's rays hit the earth more directly or indirectly? Does a combination of the two factors cause the temperature of the area to be colder or hotter? These are the ideas you will investigate. **Hypothesis:** I think that \_\_\_\_ temperature of an area the most because \_\_\_\_\_ **Research:** Find a city's average temperatures and average hours of daylight for each month in a year. Use the website listed and record your data in the table below. https://store.labaids.com/middle-school-curriculum/simulations/sepup seasons5.html (Check to see the link on the blog). You may use Bing to find the latitude and longitude of your city. City \_\_\_\_\_ Latitude \_\_\_\_ Longitude \_\_\_\_ Average Temperature Month Daylight hours and minutes Graph: You will have 2 values to graph on the Y axis. o The X axis is the independent variable. The X axis is \_\_\_\_\_ write this on the X axis. You will need 2 columns for each Independent variable. o The left Y axis is the dependent variable. It is a number. For clarity, put daylight on the left o Determine the scale for your country and get it ok'd by your teacher. Put on graph. o The right Y axis is the other dependent variable it is also a number. For clarity put temperature in °F on the right. o Determine the scale for your country and get it ok'd by your teacher. Put on graph. o The sun shines during the day. Graph Day ight in yellow (yes yellow, but make it a BOLD yellow).

0	Temperature make the red line rise in a thermometer. Graph the temperature in red.	•
0	Now assemble your team project.	

Analysis:

1. Where is Quito? (Word) \_\_\_\_\_\_ Now, place a **Q** symbol on the globe:



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- 2. Looking at Quito, write two sentences comparing daylight and temperature. Use the words latitude and direct/indirect sunlight in your sentences.
- 3. Now locate each of the other cities. Place the following symbols on the globe **A**, **C**, **M**. Write a couple of sentences comparing daylight, latitude and direct sunlight and temperature for each city.

City		
,	 	

Conclusion: Use the strategy/format in the classroom to complete this section. Write on binder paper if you need it 3