

Student Worksheets

Activity 2

Climate Classification

City/location name: _____ Country: _____

Latitude °N or °S: _____ Longitude °E or °W: _____

Task 1: Using the city data provided **produce** a climograph of monthly mean air temperature and precipitation.

Task 2: Write a description of the climate of this location.

Task 3: Classify the climate of the location using tables 3A and 3B.

	Value
T _{ann}	Annual Air Temperature (°C)
T _{min}	Air Temperature of Coldest Month (°C)
T _{max}	Air Temperature of Warmest Month (°C)
P _{ann}	Accumulated Annual Precipitation (mm)
P _{th}	Precipitation Threshold (mm)

Main climate type is: _____



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	Value
T _{rain}	Amount of precipitation in the driest month (mm)
T _{winter}	Amount of precipitation in the wettest winter* month (mm)
T _{month}	Amount of precipitation in the driest winter* month (mm)
P _{winter}	Amount of precipitation in the wettest summer* month (mm)
P _{month}	Amount of precipitation in the driest summer* month (mm)

Are there at least 4 months with Air Temperature greater than 10° (yes/no)? _____

* Note: Winter and Summer are defined as half-years within this classification system. Therefore, winter is considered to be "low-sun" months (November through March in the Northern Hemisphere, or April through September in the Southern Hemisphere) and summer is considered to be "high-sun" months (April through September in the Northern Hemisphere, or October through March in the Southern Hemisphere).

Main climate type is: _____
 (from Table 3A calculations)

First sub-climate classification is: _____

Second sub-climate classification is: _____

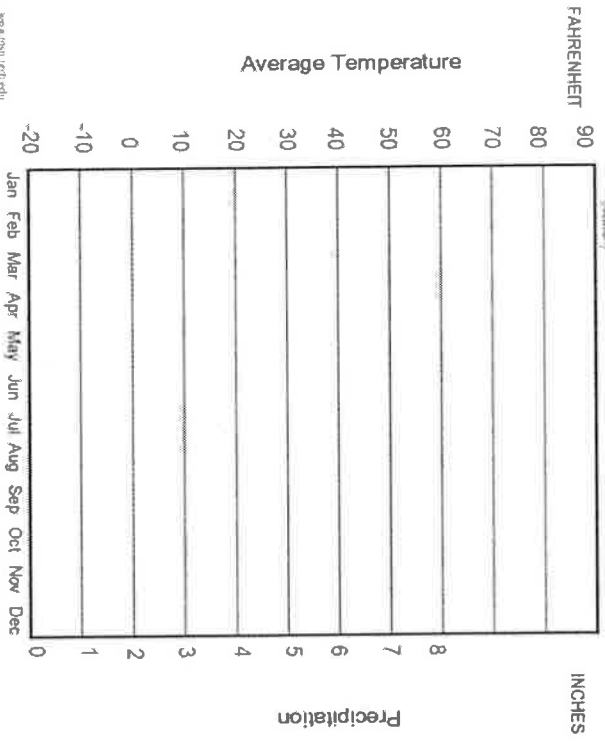
Köppen-Geiger Classification is: _____

Question 1: How does this classification compare with the climate description you wrote in Task 2?

Task 3: If you have classified the climate of a location near your school upload the classification to Google Earth at <http://globe.gov/sciprotocols/c2p03a>.

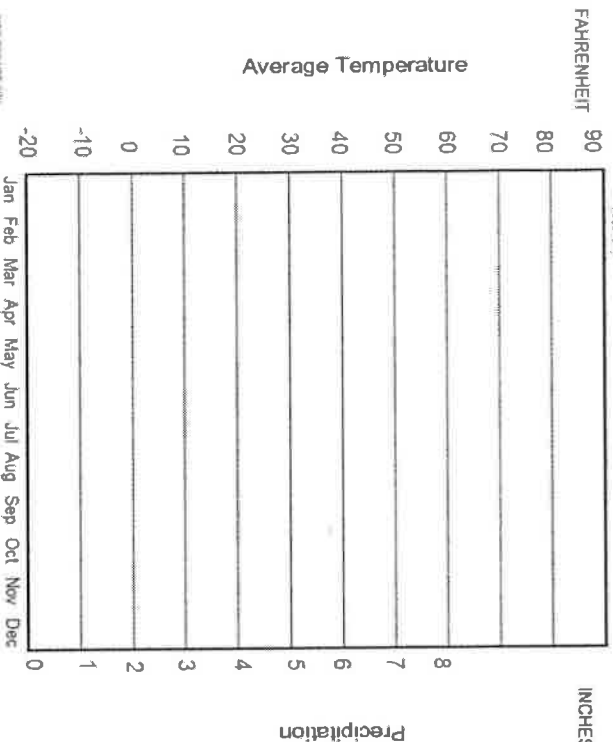


Climograph for: _____ Student Name: _____



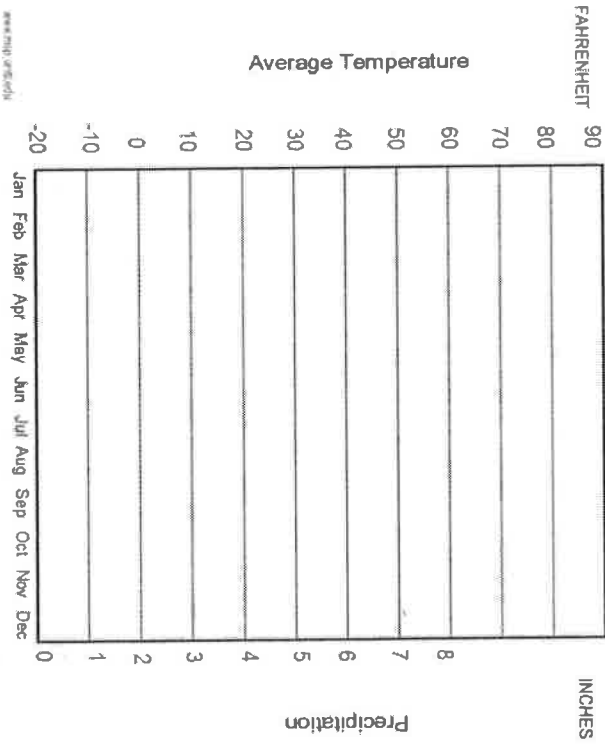
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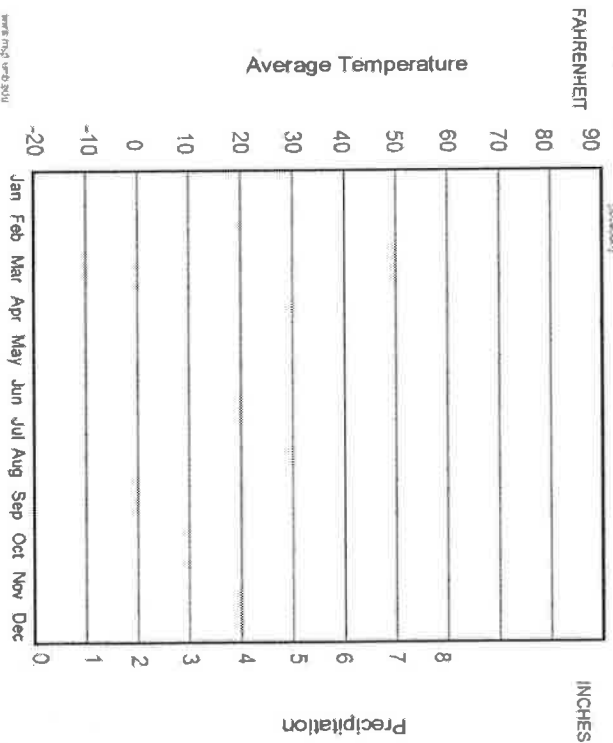
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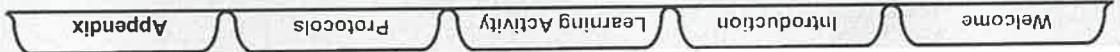
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Activity 2 - Climate Classification – Temperature and Rainfall Data

Anchorage, Alaska, USA (1916-1990, from GHCN)		
Month	Mean Temp (°C)	Monthly Accumulated Precipitation (mm)
January	-10.3	20.9
February	-7.5	18.8
March	-4.2	15.2
April	1.8	13.1
May	7.7	14.8
June	12.2	24.5
July	14.2	45.6
August	13.2	64.8
September	8.8	66.7
October	1.8	48.6
November	-5.5	25.8
December	-9.7	25.0

Bangalore, India (1875-1990, from GHCN)		
Month	Mean Temp (°C)	Monthly Accumulated Precipitation (mm)
January	21.0	4.9
February	23.1	5.9
March	25.8	11.5
April	27.6	38.7
May	27.1	114.4
June	24.5	78.0
July	23.5	105.8
August	23.4	137.6
September	23.5	174.9
October	23.3	156.8
November	21.9	62.5
December	20.7	16.7



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Bangkok, Thailand (1840-1990, from GHCN)		
Month	Mean Temp (°C)	Monthly Accumulated Precipitation (mm)
January	25.9	10.6
February	27.6	28.2
March	29.2	30.7
April	30.1	71.8
May	29.6	189.4
June	29.0	151.7
July	28.5	158.2
August	28.4	187.0
September	28.1	319.9
October	27.7	230.8
November	26.8	57.3
December	25.5	9.4

Cairo, Egypt (1951-1990, from GHCN)		
Month	Mean Temp (°C)	Monthly Accumulated Precipitation (mm)
January	13.8	5.1
February	15.2	3.82
March	17.4	3.7
April	21.4	1.5
May	24.7	1.0
June	27.3	0.2
July	27.9	0.0
August	27.9	0.0
September	26.3	0.0
October	23.7	1.0
November	19.1	2.5
December	15.1	5.7

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Kiev, Ukraine (1812-1990, from GHCN)		
Month	Mean Temp (°C)	Monthly Accumulated Precipitation (mm)
January	-5.6	37.7
February	-4.7	34.4
March	0.3	38.9
April	8.1	44.8
May	15.3	51.8
June	18.8	69.1
July	20.4	77.1
August	19.0	64.4
September	14.0	46.7
October	8.0	43.3
November	1.2	45.4
December	-3.1	43.5

London, England (1841-1990, from GHCN)		
Month	Mean Temp (°C)	Monthly Accumulated Precipitation (mm)
January	3.9	48.9
February	4.2	38.8
March	5.7	39.3
April	8.5	41.4
May	11.9	47.0
June	15.2	48.3
July	17.0	59.0
August	16.6	59.6
September	14.2	52.4
October	10.3	65.2
November	6.8	59.3
December	4.8	51.2



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Riyadh, Saudi Arabia (1941-1990, from GHCN)		
Month	Mean Temp (°C)	Monthly Accumulated Precipitation (mm)
January	14.3	13.8
February	16.2	10.4
March	20.8	29.8
April	25.0	29.7
May	30.8	13.1
June	33.6	0.0
July	34.6	0.0
August	34.4	0.0
September	31.4	0.0
October	25.3	0.7
November	20.6	4.5
December	15.4	11.3

Tokyo, Japan (1876-1990, from GHCN)		
Month	Mean Temp (°C)	Monthly Accumulated Precipitation (mm)
January	3.6	49.9
February	4.3	71.5
March	7.4	106.4
April	13.0	129.2
May	17.3	144.0
June	20.8	176.0
July	24.7	135.6
August	26.1	48.5
September	22.4	216.4
October	16.5	194.1
November	11.1	95.6
December	6.1	54.4