

Guided Notes: Factors that Affect Climate

_____ : The daily conditions of the atmosphere. Temperature & precipitation.

_____ : Moisture that falls from the sky (rain, snow, etc.)

_____ : The average weather over time.

Climograph: A graph that indicates the _____ & _____ for an area.

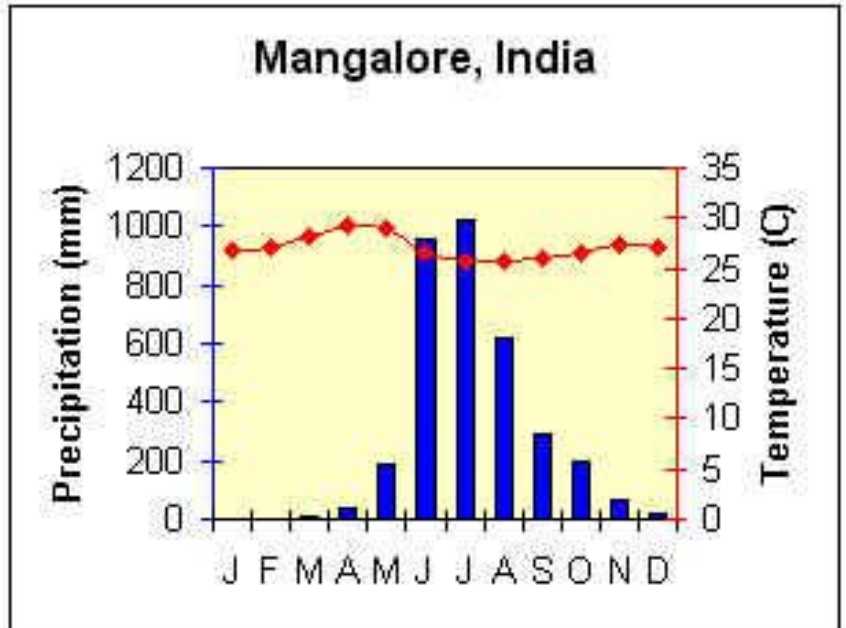
Practice:

How much precipitation does Mangalore, India get during the month of July?

How much precipitation does Mangalore get in January?

What is the average temperature in September? What about May?

Climograph



5 Major Factors that Affect Climate

- _____ (how close to or far away you are from the equator)
- _____ & _____ (they move heat and cold around the earth; cold water off the coast means dry weather on land and warm water means humid conditions on land)
- _____ (places further inland have harsher climates with larger variations in temperature throughout the year than locations close to the sea do)
- _____ (the higher up a mountain you go, the colder it gets)
- _____ (mountains can block cold/heat or moisture; rain shadow effect)

The most important factor affecting climate is: _____

... *Latitude affects climate because*

Climate and Vegetation Zones

Use pages **30-33** and the maps in the back of *Geography Alive* (558-598) to find the missing information.

Climate Zone!	Description	Ex. of 2 Countries
Ice Cap	Very cold all year with permanent ice and snow	
Tundra	Very cold winters, cold summers, and little rain or snow	
Subarctic	Cold, snowy winters and cool, rainy summers	
Highlands	Temperature and precipitation vary with latitude and elevation	
Marine West Coast	Warm summers, cool winters, and rainfall all year	
Humid continental	Warm, rainy summers and cool, snowy winters	
Mediterranean	Warm all year with dry summers and short, rainy winters	
Humid Subtropical	Hot, rainy summers and mild winters with some rain	
Semiarid	Hot, dry summers and cool, dry winters	
Arid	Hot and dry all year with very little rain	
Tropical wet and dry	Hot all year with rainy and dry seasons	
Tropical wet	Hot and rainy all year	

Vegetation Zone!		Description	Ex. of 2 Countries
Ice Cap		Permanent ice and snow; no plant life	
Tundra		Treeless plain with grasses, mosses, and scrubs adapted to a cold climate	
Coniferous forest		Evergreen trees with needles and cones	
Mixed forest		A mix of coniferous and deciduous trees	
Deciduous forest		Trees with broad, flat leaves that are shed before winter	
Temperate grassland		Short and tall grasses adapted to cool climates	
Chaparral		Small trees and bushes adapted to a Mediterranean climate	
Desert Scrub		Small trees, bushes, and other plants adapted to a dry climate	
Desert		Arid region with few plants	
Tropical grassland		Grasses and scattered trees adapted to a tropical wet and dry climate	
Broadleaf Evergreen Forest		Tall trees with large leaves that remain green all year	

Answer the following in complete sentences:

- 1) What two countries on the West coast of South America are primarily highland climate?
- 2) The cities of San Francisco and St. Louis are located on the same line of latitude. Why is the climate so different?
- 3) What climate zone is most common near the Equator?
- 4) Why are parts of Northern Russia and Greenland uninhabited (people don't live there)?
- 5) Find the Arabian Peninsula. What is the most common climate here? How do you think this influences the way people live in this part of the world?
- 6) What climate and vegetation zones do you think are good for farming? Why?
- 7) How do different climate and vegetation zones determine what types of jobs people can do in a place?
- 8) When it is summer in Austin, Texas, what is the season in Sydney, Australia?
- 9) Explain the relationship between the seasons and the tilt of the earth:
- 10) How does elevation affect climate and vegetation?