

FACTORS THAT AFFECT CLIMATE

Weather is the set of environmental conditions encountered from day to day.

Climate is the set of environmental conditions averaged over many years.

The factors that affect climate are very similar if not the same as the factors that affect weather. These factors can be remembered by the mnemonic "In the summer, the temperature is **lower near water**".

	FACTOR and its EFFECTS on CLIMATE
L	LATITUDE – as you move away from the equator, the sun's rays are less direct. Therefore, the temperature decreases
O	OCEAN CURRENTS – The temperature of the ocean current affects the air that passes over it.
W	WINDS – The prevailing winds are the established pattern of winds. These winds move the air masses that effect our weather.
E	ELEVATION – It gets colder as the elevation increases. As air moves up, it expands because air pressure is less. As it expands, it loses heat. 1°C/100m
R	RELIEF – Windward side of a mountain range is warm and wet. The leeward side of a mountain range is warm and dry.
Near water	NEAR WATER – Water has a moderating effect on temperature. In the summer, it keeps the air over it and nearby cooler. In the winter, it causes the temperatures to be warmer.