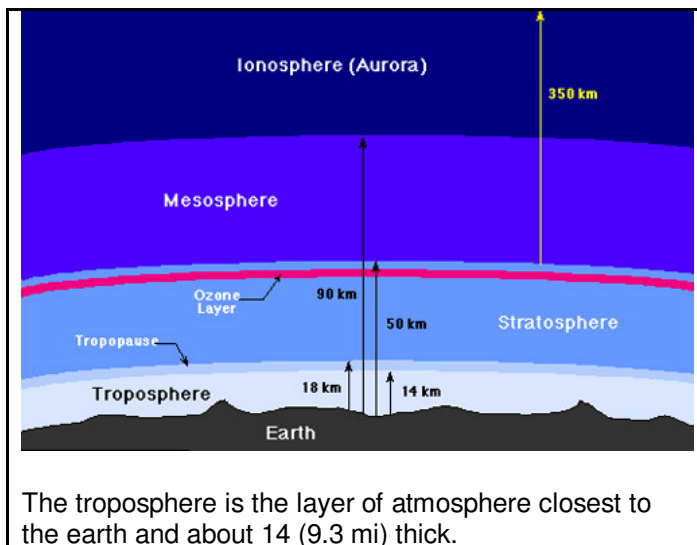


## Lesson 2

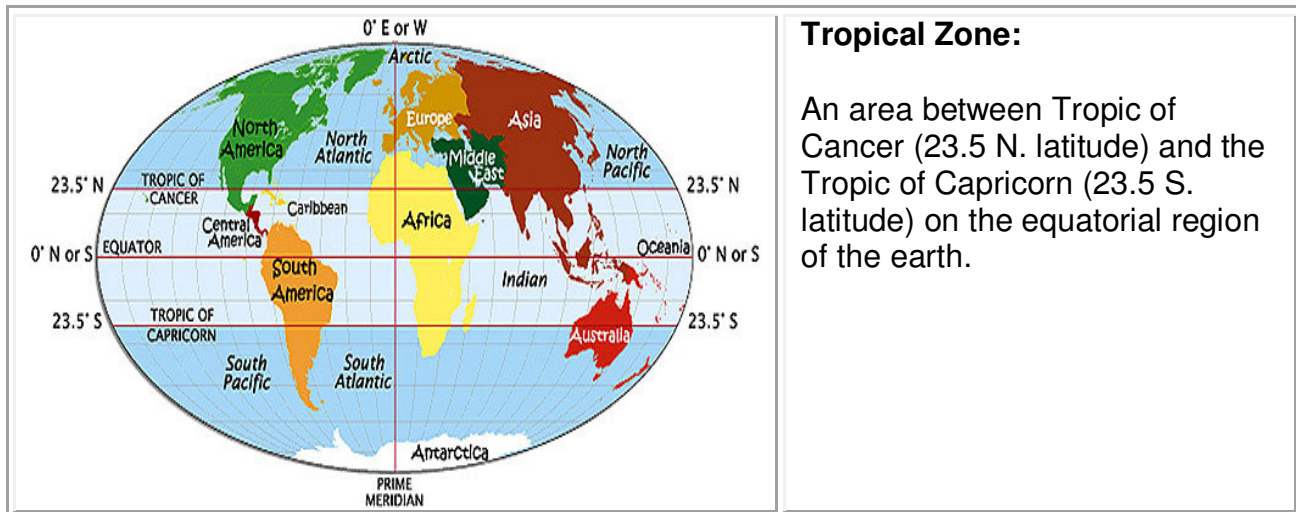
### Vocabulary Words:

<b>Prejudice</b>	1. An adverse judgment or opinion formed beforehand or without knowledge or examination of the facts. 2. A preconceived preference or idea. 3. a partiality that prevents objective consideration of an issue or situation [syn: bias] Predetermined-to settle or decide in advance
<b>Predicted</b>	To state, tell about, or make known in advance, especially on the basis of special knowledge.
<b>Bias</b>	1. a particular tendency or inclination, esp. one that prevents unprejudiced consideration of a question; prejudice. 2. An unfair act or policy stemming from prejudice.
<b>Modulate</b>	fix or adjust the time, amount, degree, or rate of; "regulate the temperature"; "modulate the pitch"
<b>Escalate</b>	To increase, enlarge, or intensify
<b>Catastrophic</b>	1. a sudden and widespread disaster 2. a sudden, violent disturbance, esp. of a part of the surface of the earth; cataclysm.
<b>Consensus</b>	An opinion or position reached by a group as a whole
<b>Anthropogenic</b>	caused or produced by humans

**Temperature Gradient:** In atmospheric sciences (meteorology, climatology and related fields), the temperature gradient (typically of air, more generally of any fluid) is the rate of change of temperature from one point to another.



**Middle Troposphere:** The troposphere is the lowest portion of the earth's atmosphere. It is about 14 Km (9.3 mi) in depth. The middle troposphere is between 7 to 12 Km (5 to 8 mi) in altitude.



**Tropical Zone:**

An area between Tropic of Cancer (23.5 N. latitude) and the Tropic of Capricorn (23.5 S. latitude) on the equatorial region of the earth.

**Global Warming:** Global warming is a term that has been used to describe a period in recent history when the earth’s surface temperature warmed. There have been three periods of global warming since 1850; from 1860 to 1880, 1915 to 1945, 1975 to 1998 (see graph). The most recent warming was originally thought to be caused by the emissions by man of carbon dioxide, commonly called by its scientific name CO<sub>2</sub>. Each period of warming was separated by a period of global cooling. The warming/cooling cycles, and their associated change in precipitation patterns are called climate change. Climate change has been occurring for the past 11,000 years since the last ice age.

**Greenhouse Gases:** Greenhouse gases are those gases that allow most solar radiation (mainly visible light) to penetrate to the earth’s surface, but absorb thermal infrared radiation emitted by the earth’s surface. As solar energy reaches the earth’s surface some of it is reflected back out into space, some is absorbed by the atmosphere, and the rest is absorbed by the earth and warms it. The warm earth then emits infrared radiation which we cannot see. Most of this infrared radiation is absorbed by the various greenhouse gases, much of which is emitted back down to the surface of the earth where it starts the cycle again. This cycle is called the **greenhouse effect** because it acts somewhat like a greenhouse in that it allows the sunlight to penetrate the greenhouse, but as the greenhouse warms, the glass ceiling and walls prevent most of the heat from escaping.

**NGO- Non-governmental Organization:** A nonprofit group or association like the Sierra Club or Nature Conservancy organized outside of institutionalized political structures to realize particular social objectives (such as conserving nature) or serve particular constituencies (such as local communities).