## Gasses in the Atmosphere (Air)

The atmosphere is composed of only a few gasses.

Nitrogen	78%	
Oxygen (O <sub>2</sub> ) Ozone (O <sub>3</sub> )	21% 	Biological Origin. Stratosphere absorbs UV.
Argon	1%	Inert, does not react easily.
Water Vapor	0-4%	Variable, Absorbs Heat.
Carbon Dioxide	.03%	Absorbs Heat, may ↑ 2X

This collection of gasses is called air. The outstanding physical characteristic of air is that it is transparent, so sunlight (and other short wave energy) is transmitted through air easily.

The last two, water vapor and carbon dioxide, are far more important than their percentages suggest. They absorb or trap some of the heat escaping from the earth's surface. This warms the atmosphere and insulates the earth's surface. This processes is called the green house effect. Humans are accelerating the green house effect by burning fossil fuels and adding Carbon Dioxide to the Atmosphere.

The ozone is found in the stratosphere. It absorbs or traps the ultra-violet energy coming in from the sun. This protects life from the hazardous effects of UV energy. Adding certain chemicals (Cfc's) to the atmosphere destroys some of the ozone layer and permits more UV to get down to the earth's surface.