

MAIN POINTS

- ❑ Ozone is an important constituent of the stratosphere where it shields us from harmful amounts of UV radiation.
- ❑ CFC's and nitrogen oxides act to destroy ozone in the stratosphere.
- ❑ Greenhouses gases are those that transmit visible radiation while absorbing IR radiation. This results in heat building up in the atmosphere like in a gardeners greenhouse.
- ❑ Carbon dioxide is the most important greenhouse gas. It is produced naturally by respiration and consumed by photosynthesis, among other processes. Nature's balance of carbon dioxide concentration has apparently been altered by the industrial revolution.
- ❑ Gases can be described by their properties such as density, temperature, and pressure.
- ❑ Pressure is a measure of force per unit area.
- ❑ The pressure and volume of a gas are inversely related (all other conditions constant). (Reader's Digest - April 1997 "One Minute Left" pg 94)
- ❑ The volume and temperature of a gas are directly related (all other conditions constant).
- ❑ The volume and the number of moles of a gas are directly related (all other conditions constant).
- ❑ These relationships lead to the ideal gas equation.
- ❑ The ideal gas equation can be used to determine a number of characteristics of a gas, including the density and molar mass.
- ❑ A number of "real world" applications for these relationships were discussed, including automobile air bags, refrigeration, and thermal pollution.