OZONE

There are 2 types of ozone in our atmosphere. One type is found in the stratosphere and one is found in the troposphere.

| | Ozone in Troposphere (low altitude) | Ozone in Stratosphere (high altitude) |
|---|---|--|
| In general, is it good or bad? | BAD | GOOD! |
| Why is it good or bad? | Bad because it is a type of pollution. Ozone and other compounds in car exhaust form <u>smog</u> . | Good because it protects us from harmful UV radiation from the sun. |
| Effects upon humans? | Irritates the eyes, nose, throat, and lungs of animals (including humans). | It protects us from UV radiation, which causes skin cancer and eye damage. |
| Where is it found? | In the troposphere (the lowest level of Earth's atmosphere, right above Earth's surface). | In the stratosphere (layer of Earth's atmosphere above the troposphere). This ozone makes up the <u>ozone layer</u> . |
| How is it made? | From the burning of fossil fuels (mainly through automobile exhaust). | It is found naturally in the stratosphere. |
| How is it destroyed? | Winds and storms can blow the pollution away. | CFCs (Chlorofluorocarbons) found in refrigerants and aerosols. These caused the "ozone hole" |
| What is its chemical structure? | Ozone = 3 oxygen atoms (O_3) | Ozone = 3 oxygen atoms (O_3) |
| Other chemicals involved in its formation or destruction? | Sunlight; nitrogen and sulfur compounds from automobile exhaust. | CFCs |