III. Gather Data

A. Ozone Eaters

- Click on the "Twenty Questions" site.

1. How is ozone distributed in the atmosphere?

_____

2. What is the "Ozone Hole" ?

_____

_____

_____

3. Besides CFCs, what other molecules destroy ozone?

_____

- Click "Back" to return to the Ozone "Gather Data.1" web page.

B. Proof of Damage

- Click on the "Evidence" site.
- Look at the figure and answer the following questions:

1. As the concentration of chlorine rises, what happens to the concentration of ozone?

_____

- Click "Back" to return to the Ozone "Gather Data.1" page.

C. Natural vs. Artificial

- Click on the "Chlorine Sources" site.

1. Since nature produces chlorine all the time, why do only artificially produced chlorine molecules cause trouble?

_____

_____

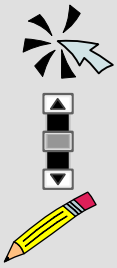
_____

_____

2. What percent of the chlorine in the atmosphere can be attributed to nature? _____

- Click "Back" to return to the Ozone "Gather Data.1" web page.
- Click "Forward" at the bottom of the page.

D. Total Ozone Loss



- Click on the "October Ozone Hole" site.
- Scroll down to the graph.

1. Compute the percentage of ozone in Antarctica in 1993 compared to the amount of ozone we had in October in 1957.

   a. Estimate the total ozone in 1957 and record it below.
   _____ Dobson units.

   b. Estimate the total ozone in 1993 and record it below.
   _____ Dobson units.

   c. Divide the 1993 value by the 1957 value.
   d. Move the decimal two places to the right to get the percentage of ozone that we have now.

- Click "Back" to return to the Ozone "Gather Data.2" web page.

E. Sunburn Effects

- Click on the "Ultraviolet Radiation" site.

1. If the concentration of ozone decreases 30%, how much additional UV radiation will reach the surface of the earth? _____

- Click "Back" to return to the Ozone "Gather Data.2" web page.

F. Future Outlook

- Click on the "Ozone Recovery" site.

1. What is expected to happen to the ozone layer during your lifetime?

_____

_____

- Click "Back" to return to the Ozone "Gather Data.2" web page.

G. Usual Suspect

- Click on the "Rural Ozone" site.

1. What problems are associated with ozone at ground level?

2. How are we producing ozone at ground level?

3. How can we decrease the ozone concentrations at ground level?

4. What changes in our lives can we make to reduce ozone concentrations at ground level?

- Click "Back" to return to the Ozone "Gather Data.2" web page
- Click "Return" at the bottom of the page, or choose "Ozone" from your Bookmarks or Favorites.
- Click on "Application."