

Lecture Questions: Ozone Depletion

These questions are taken from chapter 2 of your textbook (sections 1 and 6-12) and from the paper entitled "Twenty Questions and Answers About the Ozone Layer: 2010 Update."

1. At what altitudes is the ozone layer located? What is the maximum concentration of ozone in the ozone layer?
2. The *Chapman cycle* explains how the ozone layer is formed and maintained. Please describe this process in some detail.
3. What are CFCs? What are they used for?
4. How do CFCs destroy ozone? Explain in some detail.
5. These questions are about the 'ozone hole.'
 - (a) What is it? Be sure to explain where and when it forms.
 - (b) When was the ozone hole first detected? By whom?
 - (c) How does the ozone hole form? Why doesn't it form elsewhere?
6. What treaty was signed to control ozone depletion, and when did it go into effect? How effective has it been in controlling stratospheric chlorine levels?
7. How severe has stratospheric ozone depletion been on a global scale? When is it expected to recover?