

# Ozone Student Activity Book

## I. Introduction

Ozone is similar to oxygen that we breathe. Air contains oxygen molecules that are made up of two oxygen atoms combined together ( $O_2$ ). Ozone is a molecule made up of three oxygen atoms combined together ( $O_3$ ). Ozone is everywhere in our atmosphere, but most of it is at the altitude that airplanes fly. It is poisonous if inhaled, but it also shields us from ultraviolet (UV) light that would give us skin cancer. Ozone is therefore one of those things that we can't live with and can't live without, but if it's in the right place, it does us a great service. Naturally, there is very little ozone at ground level, and very much of it in the upper atmosphere. Start the activity to learn more about ozone's effects.

### Get Info Objectives

1. Describe where the ozone layer is.
2. Explain natural formation of ozone.
3. Explain how CFC's destroy ozone.

### Gather Data Objectives

1. Interpret graphs of ultraviolet radiation, ozone concentration, and chlorine concentration.
2. Explain why artificial chemicals are more destructive to ozone than are naturally occurring chemicals.
3. Describe ozone's harmful effects at ground level.

## Application Objectives

1. Describe the economic effects on people affected by ozone depletion.
2. Describe economic effects of banning CFCs.
3. Justify international ozone-related laws.

Before doing anything else, add the NOAA Research "Ozone" page to Bookmarks or Favorites on your web browser.



- From the NOAA Research Ozone main page, click "Get Info."