

APES-Global Climate Change Book Project

You will create a book to teach others about the following topics. You must include a comprehensive page on each topic listed below. This project must be creative, neat, and it should be obvious that a considerable amount of time was spent on it.

Section 1. Ozone Depletion

- * Layers of the atmosphere (draw and label a diagram)
- * Montreal Protocol (what is it? How does it work?)
- * Ground-level Ozone vs. Stratospheric Ozone (compare, explain environmental & health effects of the different types of ozone)
- * Solutions to ground level ozone
- * Solutions to the hole in the ozone (where is it located and WHY?)

Section 2. Causes of Global Climate Change

- * Greenhouse Gasses (*what they are, where do they come from, what percentage*) & Greenhouse Effect
- * EPA's regulated air pollutants
- * El Nino & La Nina (compare and explain how each effects the environment)
- * Major Types of Fuel Types (*pros and cons of each; you need to include: oil, natural gas, & coal*)

Section 3. Effects of Global Climate Change

- * Climate Change as an example of *Positive Feedback* Loops (explain)
- * Industrial vs. Photochemical Smog (with specific examples of each)
- * Temperature Changes (with specific example)
- * Changes in Precipitation (with specific examples)
- * Sea Level Changes (with specific examples)
- * Changes in Global Ice (with specific examples)
- * Changes in Biota (with specific examples)

- * Proxy Indicators (*explain how each of the following helps us understand climate: ice cores, tree cores, ocean sediment, coral, pollen*)

Section 4. Solutions to Climate Change

- * Kyoto Protocol (*what is it? Explain the debate over this law*)
- * Carbon Offsets
- * Major Types of Renewable Fuel Types (*pros and cons tidal & wave energy, geothermal wind, solar energy, hydropower, algae/biofuel*)