**APES-Global Climate Change Book Project**

**This will count toward your EXAM for this unit- make sure you do a good job!**

**Due: April 19th**

You will create a (group-4) 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 (Person #1)**

🡪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 (Person #2)**

🡪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 (Person #3)**

🡪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 (Person #4)**

🡪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)*