APES – Review Book - Activity – CHAPTER 8

READ the Chapter 8 Review and complete the following WS. Please study the summarized content to help you understand the **KEY Terminology** and the **KEY concepts.**

The responses are hand generated (in PEN). You don't need to print this document; you just need the lined paper to respond to the questions.

I. Copy the **Key Terms** and define them all. Make sure to memorize the terms. *(There will be quiz on each Chapter Review)*

II. Answer the **Comprehension Questions and/or Concept Topics**:

1. STUDY and IDENTIFY types of **Air Pollution**

A) UNDERSTAND the layers of the atmosphere and what is happening in the each one – gases, percentage of gases, weather, $ozone_3$, etc.

B) IDENTIFY and MEMORIZE the difference between the types of pollutions

a) primary pollution

b) secondary pollution

c) STUDY the **AP Tip!!!**

C) MEMORIZE and CREATE a chart for the **major air pollutants** with the source and effect

Pg. 235 – 238 – the most comprehensive summary of air pollution!

D) DEFINE – **photochemical smog –** FF (transportation)+O_2 – NO – NO_2 – (PANs) + UV + VOC

E) DEFINE – **acid deposition** – source, formation, effects, and buffers

F) DEFINE – **indoor air pollution** – smoking, formaldehydes, radon, sick-building syndrome, asbestos, CO, mold, dust mites, etc.

2. UNDERSTAND and MEMORIZE the relationships among **air pollution and the Global Climate Change**

A) IDENTIFY and DEFINE **the greenhouse gases**

B) IDENTIFY the imbalance and other compounds that disturb the greenhouse gases effect

READ: AP Tip!

C) **FOCUS on CONSEQUENCES of air pollution:**

a) presence of CFCs, extra CH_4, CO_2, N_2O (fertilizers)

b) sea level rising, melting permafrost, extreme weather, change in ocean current, change/shift in vegetation zones, biodiversity loss,

c) **ocean acidification** – learn the process and WRITE DOWN the equation

d) ozone depletion – STUDY ozone layer thinning – polar stratospheric ozone depletion

a) S. Rowland and M. Molina

b) **$CFCl_3$ + UV radiation → Cl + $CFCl_2$**

Cl + O_3 → ClO + O_2 REPEAT ClO+ O → Cl + O_2 REPEAT

c) Ozone is measured in **Dobson units** from the ground in a column

d) REMEMBER there are different types of ozone – READ **AP TIP!!!**

D) LIST and MEMORIZE all the **Air Quality acts!**