

Welcome to AP Environmental Science!

I am excited to meet all of you this August! To prepare for this course, please complete Chapter 1 and 2 Questions attached below. These chapters are a review of what you are going to learn this school year and a review of the scientific method.

Also you will need to purchase the AP Environmental Science Study Guide, “5 Steps to A 5-AP Environmental Science” written by Linda Williams, you can purchase the 2016 or 2015. I also would suggest buying one off Amazon if you want to save money.

You will need to complete the following out of this study guide:

Read Chapter 1-This will describe your AP Exam.

Read Chapter 2-This is about Planning Your Time

Complete Chapter 3 Diagnostic Exam and see how you do!!

Read Chapter 4-Approaching Each Question Type

Enjoy your summer and see you soon!! If you need to get a hold of me, my email is widenerl@pcsb.org.

**ALL OF THE ABOVE IS DUE: AUGUST 16th for Blue Day kiddos and
AUGUST 17th for Gold Day kiddos!**

Thank You,

Mrs. Iovino

Practice Questions – Chapter 1

Environmental Problems, Their Causes, and Sustainability

1. Describe what is meant by the phrase “*an environmentally sustainable society*” as related to the human population.
2. Distinguish between (a) natural capital (b) natural resources (c) natural services (d) solar capital (e) natural capital degradation.
3. What is the difference between *economic growth* and *economic development*? Describe **two** basic ways that economic growth can be accomplished.
4. Distinguish between *developed countries* and *developing countries*. Give **three** key characteristics of each one.
5. Define and give **three** examples of environmental degradation.
6. What is an “*ecological footprint*”? Using specific countries as examples, explain the difference between the footprint of a developing and developed country.
7. What is “*culture*”? Describe **three** major cultural changes that have occurred since humans arrived on earth. Why has each change led to more environmental degradation? What is the *environmental* or *sustainability revolution*?
8. Identify **five** basic causes of the environmental problems we face today.
9. What is “*poverty*”? In what way do (a) poverty or (b) affluence affect the environment. Explain the problems we face by not including the harmful environmental costs in the prices of goods and services.
10. Distinguish between *planetary management*, *stewardship*, and an *environmental world view*.

Vocabulary Words

Exponential growth
Environment
Environmental Science
Ecology
Environmentalism
Sustainability
Gross Domestic Product (GDP)
Per capita GDP
Per capita GDP PPP
The Wealth Gap
Resource
Conservation
Renewable resource
Non-renewable resource
Sustainable yield
Point sources
Non- point sources

Practice Questions – Chapter 2

Science, Matter, Energy, and Systems

1. Distinguish between *inductive reasoning* and *deductive reasoning*. Give an example of each. Explain why scientific theories and laws are the most important results of science.
2. Contrast the “Independent” and the “Dependent” variable.
3. What is a *feedback loop*? Distinguish between a *positive feedback loop* and a *negative feedback loop* and give an example of each.
4. What is the difference between a *time delay* and a *synergistic interaction in a system* and give an example of each.
5. What is *energy*? What is *energy quality*? Distinguish between *high quality energy* and *low quality energy*. Give an example of each.
6. Define the 1st Law of Thermodynamics and the 2nd Law of Thermodynamics and give examples of each as it relates to Environmental Science.

Vocabulary Word

Peer review
Controlled experiment
Hypothesis
Natural Radioactive Decay
Nuclear fusion
Nuclear fission
Radioisotope
Chain reaction