

DUE DATE AUGUST 30th

AP Environmental Science Summer Assignment

Welcome to AP Environmental Science! The major topics of the class we will be covering this year are as follows:

- Energy Systems and Resources - Atmosphere, Soil, Groundwater, and Geology
- The Living World - Ecosystems and Cycles
- Populations - Demographics, Dynamics and Growth
- Land and Water Use - Agriculture, Forestry, Mining, Fishing and Global Economics
- Energy Resources and Consumption- Fossil Fuels, Nuclear Energy, Conservation and Consumption
- Pollution - Types of Pollution and their Impacts, Waste Disposal
- Global Change - Ozone, Global Warming, Loss of Biodiversity

The summer assignment will give you a brief overview of all of the topics we will go over this year. Over the course of the semester we will learn more about the science and social issues associated with each of the topics. The summer assignments will count for a grade and is due on **August 30th**. All work turned in must be your OWN work.

The assignment will be graded as follows:

- 1.. Watch "Home" - Answer the video questions included in this packet (40 points)
2. scrAPES Notebook - summaries and responses to 3 articles dealing with environmental issues (60 points)
 - A. You must purchase a 1 inch 3-ring binder to keep for scrAPES all semester.
 - B. See attached scrAPES Notebook Guidelines for details.

DUE DATE AUGUST 30th

"Home" by Yann Arthus-Bertrand Name: _____

Watch the video on YouTube and answer the following questions as you go.

The link to the video is: <https://www.youtube.com/watch?v=jqxENMKaeCU&feature=c4-videos-u>

1. Describe the conditions on early Earth.
2. What happened to the carbon that poisoned the atmosphere?
3. How did the agricultural revolution change the Earth?
4. How has Earth changed in the last 60 years since the use of oil has become more widespread?
5. What is most of the grain in the US used for?
6. What led to the dramatic decline in the biodiversity of agricultural crop species?
7. How many kilos of water does it take to produce 1 kilo of beef?
8. How have cars shaped the way housing is laid out in the US and other developed countries?
9. How much has the volume of international trade increased since 1950?
10. What are your thoughts on how the video portrays Dubai? Is it self-sustainable?
11. Rainforests are cut down to make farmland for which products/crops?
12. What makes the growth of Lagos different from how most other cities grow?
13. Where does the water from Greenland's melting ice sheet go?
14. Why are the glaciers of mountains so important for the people in the lowlands?
15. What hope does the video offer at the end?

DUE DATE AUGUST 30th

This video project covers many topics that we will discuss in APES this year. Give three specific examples that are portrayed in the video about each of the APES concepts listed below:

APES Concept	Examples
All living things are linked	1. 2. 3.
Developed vs. developing countries	1. 2. 3.
Faster and faster Human innovation & technology	1. 2. 3.
The carbon cycle	1. 2. 3.
Climatic Balance	1. 2. 3.
Shortage of resources	1. 2. 3.

After watching the film, what topics are you most looking forward to learning about this class? What questions do you have?

DUE DATE AUGUST 30th

scrAPES Notebook

In environmental science, it is important to know about current issues in the news. One of my goals for this course is to familiarize you with environmental issues that are important to our community, our country, and our world. We will be reading and discussing a variety of current events throughout the school year as well. This is a great opportunity for you to start thinking about the environment and how it affects you. Over the course of the summer, find three recent articles related to Environmental Science. You will be adding to this notebook throughout the semester.

Environmental Law	Ecosystems	Population	Water Pollution	Climate	Evolution
Cities and Waste	Geology & Energy Resources	Preserving our Biodiversity	Food/Agriculture	Air Pollution	Health Risks

All articles should be current (during the past 2 years) and taken from a reliable source. The sources may be scientific publications, popular magazines, newspapers or the like. Try the NY Times (especially Tuesday), Washington Post, National Geographic, Discover Magazine, Natural History Magazine, Scientific American, Science, Nature, Treehugger.com, etc. The articles should be long enough (more than 4 paragraphs) for you to write a substantial summary and well thought-out response. Try to find a variety of articles at the state, national, and global level (i.e. not all articles should be about the same subject) and that cover three different topics from the list above (for the summer assignment), and ALL of the topics above by the end of each semester..

Journal Format: Each student will be responsible for purchasing a 1 inch 3-ring binder, to serve as your scrAPES notebook. It will be organized in the following way:

1. Decorated front cover with your name
2. Directions (yes, the page you are reading)
3. Table of Contents (must list title, source, date, and page number in journal)
4. Each written summary/analysis followed by the article (follow format)
 - All pages in the journal must be numbered.
 - All writing must be legible and either written in black or blue ink or typed.

Article Analysis: Include all of the following components and clearly identify each component - Following the title, label as (b) Summary, (c) Analysis, etc.

- A. Article title
- B. Summary: Give a brief summary of the article (100+ words)
- C. Analysis: (include and clearly label each of the following points of your analysis)

1. Points of View: Does the article give two different points of view? Yes or No. If yes, what are they?

DUE DATE AUGUST 30th

2. **Bias:** The order in which information is presented and the amount of text devoted to influencing a reader's opinion is called bias. Is this article biased, and if so, which way is the article biased? In your opinion does the author give a positive, negative or neutral view of the environmental science topic? Explain.
3. **Controversy:** Is there any controversy surrounding this article? If so, briefly state it.
4. **Your Perspective:** State your perspective on this news article based on your personal knowledge of the topic and your reading of this article.
5. **Affect on You:** How does this topic affect you, or how does it relate to your life?

Article: All articles must pertain to Environmental Science and have significant science content. Do not include advertisements, pure opinion pieces, or light reviews of other articles.

1. The date and source of the article must be included on the page with the article and in your summary.
2. If the article is too large to glue on one page, cut and paste as needed and put it on more than one page.
3. Articles should be neatly cut out and taped, stapled, or glued into the journal. Your writing should be on a separate page in front of the article.