

AP Environmental Science Preparation Assignment 2021-2022

As you are enjoying your summer, keep your skills honed by completing the included summer assignment! AP Environmental science combines many scientific disciplines including biology, chemistry, geology and physics. To make sure you are prepared for the course, you will need to show your ability to use your chemistry, mathematical, and literacy backgrounds. Because this is a college level course, you will be responsible for learning a large amount of material on your own. Summer work is a chance for you to review your skill sets and prepare for the course, so that ultimately you can take your AP test in the spring (May 2022), pass with a score of 3 4 or 5, and receive college credit.

Materials Needed before start of school: 3 ring binder, 10 tab Dividers, computer or tablet recommended in addition to phone for access to digital textbook resources. We will be piloting a new updated textbook this school year.

General Guidelines:

- **Read the directions for each section carefully!**
- Each section should be clearly labeled.
- The checklist, provided at the end of this packet, will help you ensure you have completed all parts of assignment

Section 1: Electronic Setup

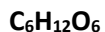
In this course, we will be using technology extensively to help you learn basic content and communicate as scientists in the 21st century. Complete each of the following tasks to ensure that you are ready to begin on the first day of class!

1. Sign up for google classroom. Click the + sign and type in code [v6rh3el](#).
2. Watch the edpuzzle video introducing Environmental Science and answer the questions.
3. Complete the Google form rating your familiarity with the Topics we will study.
4. Email me at laurawest@cusd.com introducing yourself. Please let me know the following information:
 - Your name
 - Any special hobbies or interests you have
 - Why you have chosen to take AP Environmental Science
 - Other science courses you have taken
 - Your college and career goals
 - Any concerns you have for next year
 - What you are most excited about for next year

Section 2: Chemistry Review

Chemistry is a big part of environmental science. It is highly recommended that you take chemistry before registering for this course. In order to review some of the basic chemistry concepts you will need complete the following on a clean sheet of paper. This may be typed or hand written.

1. For each of the following, write out the chemical name that goes with the symbol:



₄



2. Write at least a paragraph (5-8 sentences) that explains the following:
- What is the pH scale? What does it measure?
 - How do the numbers on the pH scale compare? Example – is a pH of 4 twice as strong as a pH of 2? Hint- the pH scale is not linear!
 - What are the average pH ratings of the following common substances in the environment?
 - Blood
 - Rain
 - Freshwater (lake or river)
 - Ocean water
 - Cite your sources using MLA format

Section 3: Current Events

In environmental science, it is important to know about current issues in the news. There are Free Response Questions on the exam, which will require you to be able to read and understand scientific articles. Over the course of the summer, find 2 recent articles related to environmental science.

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 etc. Try the NY times, Washington Post, National Geographic, Discover Magazine, Natural History Magazine, Treehugger.com, etc. Make sure print out the article, and you should be able to cite it.

Each article should relate to a different topic chosen from the following list.

- I. Earth
- II. Living Systems
- III. Populations
- IV. Land and Water Use
- V. Energy
- VI. Pollution
- VII. Global Change

Article Analysis Directions:

Complete for each article:

- 1) Annotate the articles by writing a comment or question in a google doc version. 1 Comment or questions for every paragraph in the article. Make sure to number the paragraphs. You can also print the article and annotate that way or type your annotations in a different font color under each paragraph.
- 2) Written analysis that includes:
 - Title of the Article
 - Summary: **brief** summary that tells me what the article is about.
 - Analysis:
 - a. Points of view – does the article have more than one side/pov? If so what are they?
 - b. Bias – Is this article biased in any way? In your opinion, does the author give a positive, negative, or neutral view of the environmental science topic?
 - c. Controversy: Is there any controversy surrounding this article? If so briefly explain it.
 - d. Your perspective: State your perspective on this news article based on your personal knowledge of the topic and your reading of the article.
 - e. Effect on you: How does this topic relate to you or your affect you?

Attach your completed article annotations and analysis in google classroom.

Checklist:

Name _____

Section 1: Score _____/20

I have signed up for google classroom 5pts

I completed the edpuzzle video on google classroom 5pts

I completed the google form and turned in on google classroom 5pts

I have emailed Ms. West. 5pts

Section 2: Score _____/20

I have identified all of the chemical compounds, and turned in on google classroom. 10 pts

I have written at least one paragraph about pH and turned in on google classroom. 10 pts

Section 3: Score _____/20

I have annotated my articles, attached and turned in in google classroom. 10 pts

I have summarized my articles, attached and turned in in google classroom. 10 pts

I am ready to share articles with others in the class.

This Assignment is due Tuesday, August 17th when you enter the classroom, you will be able to use it to help you on your first quiz that day. Make sure you have your binder and 10 tab dividers on Tuesday as well.