



**AP Environmental Science (AP/ES) 2021  
Woodside High School  
Summer Assignment**

**Part I. Send a text via Remind to let me know you have accessed this document. 5 pts. Due June 15th.**

Join my Remind class at [remind.com/join/e7dd36](https://remind.com/join/e7dd36). I will use this if I need to send an announcement - or notify you of an email announcement - until we have a Canvas class in the fall.

**Part II Download Dr. Art's Guide to Planet Earth and Chap 2 of Environment: The Science behind the Stories (Withgott & Laposota 6<sup>th</sup> ed.)**

- Dr Art's Guide to Planet Earth.pdf
- W&Bchap2.pdf

If you wish - you can check out hard copies of these in the school library. You will get the 5th edition of the Withgott and Laposata textbook but the content (and page numbers) on this topic is the same.

**Part III Summer reading/Review basic science content.**

Environmental Science is an interdisciplinary field. As students come into APES with different science backgrounds I want to make sure that everyone has some basic content knowledge in earth science, chemistry, biology and physics that we can build on. Read Dr. Art's book and Chapter 2 pages 22-33 in Withgott and Laposata. I expect that the content will mostly be review for you and it is background that I assume you will have when we meet together in the fall. Pay particular attention to reviewing photosynthesis and respiration, the carbon cycle, the laws of thermodynamics, the electromagnetic spectrum and feedback loops. Remember that there is a difference between understanding something when you read it and truly knowing it. I will email a practice test on this material during the summer (please remember to check your seq.org email).

**Part IV. APES Scrapbook (digital)**

Purpose: One of the important goals of science education is to help students learn how to make good decisions about public issues. What you will be studying next year in APES tends to be in the news on a regular basis. This exercise is intended to get you thinking about course content and how it is tied to current issues.

The Assignment: You must "collect" 9 newspaper articles and summarize 4 of them. Each selected article must be about or related to one of the 9 sections of the new AP Environmental Science course outline

(<https://apstudents.collegeboard.org/courses/ap-environmental-science>).

Articles must be at least 500 words and selected from reliable news sources. The articles must be published during this summer. Please read over the following criteria carefully:

- You will not receive credit for articles that are not published during the summer.
- Only news articles will be counted for credit – *not* web pages, blogs, opinion pieces/editorials or encyclopedia entries.
- Make a table with the MLA formatted citations for the articles and active links. You will upload this to Canvas at the beginning of the school year - check and make sure the links are still available then. I usually allow paper articles - but you may need to drop them off at school if you choose this option and we are still meeting online. Consider using Son of Citation Machine for help with formatting.

Topic	MLA citation of article with active link (paper copies may be submitted instead of links but you still need to post the complete citation)
The Living World: Ecosystems	
The Living World: Biodiversity	
Earth Systems and Resources	
Populations	
Land and Water Use	
Energy Resources and Consumption	
Atmospheric Pollution	
Aquatic and Terrestrial Pollution	
Global Change	

- Write an abstract (concise summary) between 50 and 75 words in length containing the essential elements of 4 of the articles you choose (please include: who, what, why, where, when, how). Your abstract should be able to stand on its own; it should make sense to someone who has not read the article. Put all of the abstracts on the same page or pages - single-spaced in case I need to print them.

### Part V Summer APES selfies

Take 3 pictures of yourself this summer in settings that relate any of the vocabulary words below. You must be in each picture and somehow indicate that this is for APES ( for example: pantomime, costume/prop, hold a picture of an ape). Upload the photos into a Google Slides Presentation that you can share in class as we get to know each other. You will upload this to Canvas on the first day of class. Include your name and the section title at the top of each slide. Be creative.

Native species (identified)

Invasive species (identified)

Non point source pollution

Point source pollution

Any local ecosystem: such as salt marsh, mixed oak woodland, serpentine grassland, redwood forest etc.

Benthic macroinvertebrate

Sub station

Producer (autotroph)

Primary consumer

A feature of passive solar design (not solar panels)

Catalytic converter

N<sub>2</sub>O

Rain garden or stormwater basin

Stormwater drain

A legume

Urban sprawl

A parasitic relationship  
A mutualistic relationship  
An example of commensalism  
Interspecific competition  
Intraspecific competition  
An r selected species  
A K selected species  
A perennial crop  
Decomposition  
Purple pipe for recycled water  
A wastewater treatment plant  
A power plant  
A refinery  
A CAFO (Confined Animal Feeding Operation) - from the outside

**Due dates:** Complete the Remind reply as soon as possible so I know you have found the assignment. The Google slide presentation of selfies and the table of article citations are due the first day of class. I will give instructions for how to submit them electronically when we first meet. Expect a test on the summer reading within the first two weeks of class.

Please e-mail me ([aaakey@seq.org](mailto:aaakey@seq.org)) if you have questions. I look forward to meeting you in the fall.

**Best wishes for a fun and re-energizing summer! Stay safe!**