



I am so excited that you've decided to take APES in the 2023-2024 school year. Yes, we will from now on often refer to it as APES, because there has never been a better acronym for something ever. Environmental Science is an engaging, relevant, hands-on subject, but also a very broad topic. In order to cover some of the topics and skills necessary for the AP test, there is a summer assignment that you need to complete before school starts. Since some of you have never taken an environmental science course and biology may have been quite a while ago, this will help refresh your memories and we can start the year off with everyone on the same page. It will also be a way to start getting excited about the subject and an excuse to get out in nature!



**Part I: Environmental Scavenger Hunt!** The goal of this part of the assignment is to experience some nature, start thinking about your role and interaction with the environment, introduce yourself to me and the class, and just have fun! There are a variety of possibilities that I hope you will find enjoyable. You should pick at least **TWO** different experiences to complete this assignment, and they must be from different categories. (You can't do two trips to the farmer's market for example!) Each experience needs to be documented separately, but can be completed on the same trip (camping overnight then going for a nature hike the next day for example). You can use experiences while on vacation, or close to home.

Each activity must be documented by providing picture evidence that will be presented in a *Google Slide Presentation*.

- You must appear in your picture (not just your hand etc. I must be able to identify you); you should also include "other" pictures of the experience. Each picture should be labeled Fig. 1, Fig. 2, Fig. 3, etc. and include a caption of what the photograph is of.
- Feel free to be creative in what/how you document the experience
- Each activity must have a reflection answering the following question:
- Which activity (from the list below)
- When it occurred
- Where it happened
- Sensory description (what did you see, hear, smell, feel, taste) trying to pay attention to details that you might not have noticed otherwise
- Was the experience a new one for you or something you've done before?
- How did the experience reinforce/change your outlook on nature etc.?

*You can bullet point these points in your google slide presentation.*

- Your presentations will be shared with your classmates, and you will each be given an opportunity to comment on each other's work.
- Projects must be completed individually, *this is NOT a group assignment*.

### **List of experiences to choose from:**

*Please practice proper social distancing measures when visiting parks, bike trails, markets, etc.*

1. Camping- spend at least 1 night sleeping outside in a tent. This can even be in your own backyard. Cabins/cottages do not count for this activity. If possible, build a campfire and try cooking a meal over it!
2. Non-motorized water activity- paddle boarding, canoeing, river rafting, sailing, paddle boating, even surfing if it is available to you!
3. Beachcombing- Wander a beach and search for interesting shells, various algae, different types of sand, etc. Should have photo evidence of at least 4 unique, natural items found. Local options include many different lakes and beaches (try looking along a more natural coastline in the marsh grasses too!) but also great for a vacation option.
4. Nature hike- explore an area of woods or wetlands while focusing on nature. Look high and low, stop to listen to the sounds, and occasionally stand perfectly still to see if you observe anything that you might miss otherwise. Should have photo evidence of at least **4 unique**, natural items found. Local options include the trails at *Baldpate Mountain*, *Goat Mountain*, *St. Michael's Preserve*, etc. You can check out the [Friends of Hopewell Valley Open Space](#) website for other trail information in our local area.
5. Farmer's market- visit a farmer's market and find a food you've never tried before. Find out where the farmers are from and how far they've traveled to bring their food to the market. Compare the prices at the market with prices in your grocery store. Are there foods offered at the market that are not offered in the store? What other foods besides fruits and vegetables are available?
6. Bike trip- variation on a nature hike, this time on wheels. Do a countryside tour, follow a greenway, or do trail riding. Local bike trails: [Biking at Delaware Canal State Park](#) or [Lawrence - Hopewell Bike Trail](#)
7. Gardening experience- whether you plant a small plot of land or try out container gardening, flex your green thumb a bit! Herbs, tomatoes, zucchini, peppers, or salad greens are good ones to try. Pick items you enjoy the most to see if you can grow your own instead of buying them. Try making a salsa garden and making your own salsa! Document your progress throughout the endeavor, and if you are successful you could even bring in some of the fruits of your labor.
8. Park exploration- Visit a State or National Park. What natural features are found in the park that make it important to preserve? Learn about the ecosystem of the area through visiting the park welcome center or nature center or reading the brochures. Local State Parks: [Washington Crossing State Park](#); [Tyler State Park \(PA\)](#)
9. Nature art- If you are an amateur artist, take your art outdoors. Create a watercolor, sculpture, drawing, or photography of nature. Go macro (landscapes) or micro (details of

things like moss, tree bark, etc. are fascinating!) Try something different from what you usually attempt!

10. Zoo/nature preserve/wildlife center visit/botanical garden- Explore a new place or go someplace you've been before. Local: [The Watershed](#); [Bowman's Hill Wildflower Preserve](#)
11. Environmental volunteer experience- Many parks and community organizations welcome volunteers to assist with trail maintenance, litter removal, etc. Local opportunities could be with: [Friends of Hopewell Valley Open Space](#); [The Watershed](#); [Mercer County Parks](#).
12. Composting- Start your own compost pile. Can be an open pile, a small bin, or vermicomposting.
13. Other approved activity- think of something else that doesn't fit in any of these categories? Just ask!

#### Scoring Rubric

Category	20-16	15-11	10-5	Less than 5
<b>Content/Experience</b>	The student designs an original, creative google slide presentation of two experiences and completely answers the points to be discussed in the introduction (highlighted in blue).	The student designs an original google slide presentation of two experiences and answers the questions in the introduction; however not entirely.	The student designs an original google slide presentation of one experience and answers the questions in the introduction; however, not entirely.	The student designs a google slide presentation that contains 1 experience; however, questions were not answered.
<b>Google Slide Presentation</b>	The Google Slide presentation is easy and clear to understand and read (large font) with several creative images for each experience. Each image is properly labeled.	The Google Slide presentation is easy and clear to understand a few graphics. Only one image per experience. Each image is properly labeled.	The Google Slide presentation is unclear and difficult to follow. Each image is properly labeled.	The Google Slide presentation is unclear and difficult to follow. Images are not properly labeled.

\_\_\_\_\_ **Total of 40 points. This assignment is due by the beginning of the class on the first day of the new school year. It should be submitted through Oncourse. If late, it will receive a 10% deduction per day for up to 1 week; after that point it will receive a zero.**

## **The Second Part of the Summer Assignment:**

**Part 2: Terms and concepts to know!** In order to prepare yourself for the course; there are also some important terms and concepts to know. Make your own copy of this [google document](#) where you can place your notes covering the embedded terms and concepts. On the second day of school, you will have a 40 pt quiz on these terms, laws, and other important content. **You will also receive a 20 point completion grade for turning in your notes to Oncourse on the first day of school by the time class begins.**

### **To recap!**

The summer assignment is worth 10% of your first marking period grade- so do a great job on it!

\_\_\_\_\_ 40 points- Scavenger Hunt Google Slide Presentation

\_\_\_\_\_ 20 points- Completion Grade for Terms/Chemical Formulas/Laws

\_\_\_\_\_ 40 points- Quiz on Terms/Chemical Formulas/Laws

\_\_\_\_\_ 100 points total

*The Google Slide Presentation, and Completion of Terms/Chemical Formulas/Laws are due on the first day of the school year by the time class begins. You will receive a 10% deduction/day for up to 1 week if late, after 1 week the work will not be accepted.*

*The quiz will be taken on the 2nd day of the school year during our designated class time.*