

AP Environmental Science 2019-2020
Summer Assignment List

Welcome to AP Environmental Science, commonly known as APES! I'm looking forward to working with you next year. APES is an advanced interdisciplinary science course that prepares students for the national AP Environmental Science exam, using a college text and requiring college level skills. The APES exam is the first Monday in May. A passing score on the AP exam may qualify the student to by-pass a semester of a first-year college environmental science course. The course has college level expectations for behavior, participation and effort. Environmental science is an immense field of study. In order to cover all the material for APES before the exam next May and get you to start thinking environmentally, you will need to complete some assignments during the summer. If you have any questions over the summer, you may email me at ssheetz@bcps.org. I will try to check my email weekly.

I. Letter of Introduction: NO later than September 1, 2019:

Email to ssheetz@bcps.org a letter of introduction with the following—place APES intro: (your name) in the subject line.

- a photograph (school photo is fine) (photo of you in nature is great)
- a description of your interests, activities, goals, etc.
- previous science courses and approximate grades
- why you elected to take APES
- what do you expect to “get” out of this class

II. Environmental Scavenger Hunt Due by September 6, 2019

A. GOALS

1. Explore, enjoy, honor, consider and document your environment
2. Take the Ape out sightseeing.

B. RULES

1. **FIND** as many of the items as you can (see list). All items can be found very locally, at some level, but might be better further afield.
2. **PROOF** of finding each item is an image (digital or film, still or motion), clearly showing (a) the item, (b) yourself, and (c) the Ape [or, in a pinch, a date-identifying item].
3. Required **DOCUMENTATION** for each image is (a) the item identification, (b) the item location, (c) the date the item was "collected", and (d) "additional information" (see list). (may record some info on the chart)
4. Your **PRODUCT** will be a PowerPoint slideshow **OR** a video.
 - a. Submitted online.
 - b. Due on Friday of the first week of class, but early submissions are encouraged. It may be shown in class.
5. **HELPING** each other:
 - a. If your product is a video: you can work with one partner (in pairs) to submit one video product for both of you. Both partners must be represented with equally throughout the video.
 - b. If your product is a slideshow: you can help each other, but your product is yours alone, with yourself in each image.
6. **You are NOT ALLOWED to trespass, obstruct traffic, violate any laws, jeopardize your safety or compromise your integrity in any way in pursuit of any item.**

C. PRODUCT: Video **OR** Slideshow including maps, with checklist

1. **VIDEO:** Each item would be a clip, including the item, the icon, you, and the requisite documentation (which could be audio, of course). **The items should be in numerical order.** Videos can be submitted with a partner.
2. **POWERPOINT SLIDESHOW:** Each item is a slide, including the item, the icon, you and the requisite documentation. Slideshows must be submitted individually. If you're doing it on google, keynote or some odder program, download it and convert it to PowerPoint.
3. **Checklist: highlight the boxes you got on the Scavenger Hunt List (this needn't be elaborate).** This will be submitted.

D. CREDIT

1. Full credit is more or less the expectation.
2. "More items" is generally better than "fewer items." **A MINIMUM OF 15 ITEMS**
3. "Best (3)" is generally worth more than "Better (2)", which is generally worth more than "good(1)", but all will satisfy the item.
4. Clarity and quality of imagery is important
5. Accuracy and thoroughness of documentation are important.
6. Creativity and entertainment value are way better than no creativity or entertainment value; they can compensate for minor deficiencies, but not for major deficiencies.
7. **Evidence of trespassing, obstruction of traffic, violation of laws, jeopardizing safety or compromising integrity will cost credit. Photo shopping or other image manipulation to gain advantage constitutes an absolute abandonment of integrity.**

E. SUGGESTIONS

1. Have fun with it; it's not supposed to be "work."
2. Build it gradually throughout the summer. Saving it all for the last day would make it "work".
3. Keep the Ape in your wallet or with your phone, so you're always ready. When you see something, whip out the Ape, take a picture or clip, and collect the info.
4. If you have no imaging device, you can borrow one from a friend, or work with a friend, or let me know and you can borrow one from me.
5. If questions arise, email ssheetz@bcps.org ; I check it irregularly during the summer BE PATIENT.

#	Category	Best (5)	Better (2)	Good (1)	Additional info/why it is beautiful or not.
1.	Lithosphere	Best rock that you find extraordinarily beautiful (exposed bedrock)	Environment that you find moderately beautiful (metamorphic rock outcrop (exposed bedrock))	No environment that you find not beautiful at all	Name of Rock
2.	Hydrosphere	Ocean	Bay	Flowing or standing water in a watershed	Name of water body
3.	Atmosphere	Cumulus-type cloud	Stratus-type cloud	Cirrus-type cloud	Name of cloud type
4.	Biogeochemical cycles	Nitrogen Cycle	Carbon cycle	Water cycle	Where the element or compound has come from and is going to
5.	Energy Flow	Carnivore consuming herbivore or carnivore (not processed "food")	Herbivore consuming producer (not processed "food")	Photosynthesis happening	Names of participating species
6.	Biodiversity	Native endangered animal	Native endangered plant,	Non-native endangered species	Name of species
7.	Biodiversity	Invasive animal species	Invasive plant species	monoculture	Name of species, and where species came from
8.	Population Growth	A human less than 1 year old	A human less than 2 years old	A human less than 5 years old	Name of the human, and a quote from the human or the human's minder
9.	Forest	Native tree you can't reach more than one quarter of the way around	Native tree you can't reach more than halfway around	Non-native tree you can't reach more than halfway around	Name of species & location
10.	Biodiversity Preserve	National park	State park	County or city park	Name of park
11.	Food Crops	Food crop being grown on a farm	Food crop being transported	Food crop being processed or retailed	Name of food crop
12.	Meat	Animals being raised for food on rangeland	Animal being raised on rangeland—not for food	Meat being retailed	Name of animal
13.	Fishing	Commercial fishing operation	Recreational fishing	Fish being retailed	Name of fish
14.	Water Resources	Water transport system	Water storage system	Water delivery and use	Where water came from and goes to
15.	Water Pollution	Point source of water pollution	Nonpoint source of water pollution	Polluted water or solid water pollutant	Type of water pollution
16.	Air Pollution	Non-mobile point source emitting	Mobile source emitting pollution	Air pollution without identified source	Type of air pollution
17.	Renewable Energy	Renewable power generating plant (solar, wind, geothermal...)	Renewable residential or commercial generator	Renewably-powered appliance	Type of renewable energy
18.	Fossil Fuels	Fossil fuel production or processing (mine, well, refinery...)	Non-gasoline fossil fuel use or retail	gasoline retail	Name of fossil fuel
19.	Solid Waste	REDUCING waste generation (instead of reusing, recycling or discarding)	REUSE of potential waste (instead of recycling or discarding)	RECYCLE ing potential waste (instead of discarding)	Potential waste that is being averted
20.	Urbanization	LEED platinum or gold building	LEED silver or certified building	Other "green" building	Name of or occupants of building, description of 'green' features
21.	Transportation	Riding public mass transit	Public mass transit	Public park & ride	Location and or destination & ride quality
22.	Transportation	Ride share/bike share/car share	People riding bikes to commute to their destination	People walking to get to their destination	Location and destination
23.	Politics and Economics	University building, from which the environment is studied	Community college building, from which the environment is studied	Commercial or office building, from which the environment is worked with	Location of building
24.	Politics and Economics	Worker in environment- related profession	Volunteer in environment-related work	Environmentally aware person	environmental role of person, and quote from person.



APES

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