

AP Environmental Science Summer Head Start Scavenger Hunt

The Purpose

This assignment is designed to provide students with authentic experiences with nature. You will have the opportunity to bring your friends and family along as you gain “real” experiences with the environment around you. Please try to make this a fun and adventurous summer project. We tried to provide as many different possible activities that we could come up with, we know there are plenty more opportunities out there. It is possible that you will need to do a bit of background research before attempting many of these activities.

Remember to always play it safe, know your personal limits, be aware of possible dangers with some of these activities, and don't go alone!

**If you have a great idea that you would like to include and you think is relevant to AP Environmental Science, contact Mr. Tonnesen

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The Rules

- **Evidence:** All activities must include all of the following: pictures or videos, descriptions, dates, ticket stubs if provided, or other evidence.
- You should make every effort to appear in your pictures/videos.
- **Reflection:** If there are no directions written next to the activity you should write a reflection about the activity.
 - Who? What? When? Where?
 - How did it affect you or your outlook?
 - Why should others do this?
 - How is this experience going to help you in AP Environmental Science?
- You are free to complete each of these activities as many times as you wish but only need to report out one time.
- Consider attempting one of the activities below if you go out of town for vacation this summer.
- Check for discounts, free days, student discounts, coupons in the paper or online. Check the visitor center at the end of Interstate 264, the oceanfront, for discounts or deals for many of these activities.
- Scrapbook: You should assemble all your work in a binder with a table of contents that is ordered by date OR you may create an electronic scrapbook using Microsoft Word, PowerPoint, Prezi.com, website (such as Weebly), or another digital medium.

The Activities

Write a reflection for each activity (see The Rules), unless otherwise noted.

- o **Take a friend to a Fishing Pier**-local piers: Sandbridge, Lynnhaven, 15th Street, Ocean View, Outerbanks-Jennette's Pier (must catch at least one fish to count)
- o **Go camping**-spend at least one night outside in a tent. Take the minimal amount of electronics with you. Try cooking over a campfire.
- o **Surfing, body boarding, or stand up paddle boarding**-there are rentals and learn to surf schools available)
- o **Two days at the beach**-compare the difference between the resort beach "the strip" and a more natural beach that is much less developed (Eastern Shore of Virginia, Hatteras Island, Ocracoke, Outer Banks, First Landing State Park, Back Bay National Wildlife Refuge).
- o **Go to an environmental museum**-(write a reflection-use the guide under the rules)
 - Norfolk Botanical Gardens
 - Norfolk Zoo
 - Nauticus at Waterside
 - VA Aquarium
- o **Boat Tours**
 - Dolphin boat tour at Rudee Inlet (through the Virginia Aquarium)
 - Sailing (not motor boating)-on a friend's boat, tour like the Virginia Rover at Waterside, we think you can even sign up for sailing lessons through ODU over the summer.
 - Fishing boat trip-on a friend's or family member's boat or a paid trip on a head boat or charter boat (must catch at least one fish to count)
 - Canoe or kayak tour-(Munden Point Park rentals, Sandbridge Eco-Sports Rentals and Tours, Chesapeake Bay Foundation tours, check the Virginia Beach Recreation Center and newspaper)
- o **Local Farm or Farmer's Market**-purchase locally grown food and cook a meal or dish with your purchases.
- o **Start your own vegetable garden**-grow at least three different food plants and prepare a dish using them.
- o **Virginia Beach Parks and Recreation**-offers environmental activities and [Classes and Programs](#)
- o **Chesapeake Bay Foundation**-Various classes and activities. Go to [Chesapeake Bay Foundation](#)
- o **Virginia Aquarium & Marine Science Center**-participate in one of the FREE summer programs.
- o **Adventures Hikes and Bikes**
 - False Cape**-Cemetery and Visitor Center-be sure to hike on the beach for part

of your trip.

•**First Landing State Park**-find Spanish Moss, wetland birds, boat, be sure to follow a few different trails.

•**Back Bay**-photograph 5 native species that you have never seen before and provide a short biography for each (Consider photographing endangered or threatened animal and plant species. Watch out for poisonous or dangerous species!)

•**Eastern Shore Bird Bike Trail (Eastern Shore Loop)**-photograph 5 native species that you have never seen before and provide a short biography for each (Consider photographing endangered or threatened animal and plant species. Watch out for poisonous or dangerous species!)

•**Find three different wetlands**-pictures, location, how do you know they are different? A map may be helpful.

•**Find at least 1 invasive species in Virginia**-take a picture, identify the species (common name is fine), location, why is this species a problem in Virginia? What is the most effective way to remove this species?

•**Climb to the top a light house**-take a picture of yourself at the top-or find three different light houses and take a picture of each.

•**Animal Biography**-locate, take pictures, and write a short animal biography for one of the following, include where you found it and the date (cannot be in a museum or aquarium and must be original pictures): Wild Horses, dolphins, Sea Star, Osprey, Egret, Hawk, Owl, Wild Pig (boar), woodpecker, sand dollar, Blue Crab (Watch out for poisonous or dangerous species!)

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o **Carbon-free day**-bike or walk everywhere. You must compare how this day is different than a normal day for you. Do not just sit at home or hang around the neighborhood-go out and do something.

o **Go to the nearest neighborhood park**-collect at least 5 different leaves from the trees, take pictures, identify the species (common name is fine), indicate if it is native to Virginia Beach, what value does each species provide to the following: wildlife, humans, and the park overall.

o **Vacation Ideas (if you have the opportunity)**

•Snorkeling or SCUBA diving-(definitely get a waterproof camera)

•Volcano Tour

•Rain forest, desert, mangrove tours

•Hike in the mountains or look for fossils in rivers and creeks

•Fill a small bag with beach sand while on vacation, and when you return do the same in Virginia Beach. Label with your first and last name. Return both with your assignment. Write a comparison of the two samples include: How are they different? Why? Identify the location of the samples, etc.

o **Local environmental current events**-Virginia Pilot (You must complete all parts below for this to count as one goal.)

Find 5 large NEWSPAPER articles related to Environmental Science (one per week). The newspaper articles that you select must have some "substance" and must have a clear connection to Environmental Science locally. If you are on vacation, look in the local paper. DO NOT take/use articles from magazines or web. DO NOT photocopy articles.

Format: Each entry should have its own two pages. Please attach the newspaper article on the left side (Fold and/or trim the article to fit on the paper without hanging off)

Article	Response

Your Response:

Summary: Write a brief summary of each article and point out the major environmental themes discussed. Your summary should be no less than 75-100 words.

Personal Response: Your personal reaction should clearly state your opinions and/or reflection on the article. Do not simply write, "This article was very interesting/good." It should be no less than 100-150 words.

Some questions to drive your discussion: What are the points of view presented about this issue? Did the article teach you something new? Does it support or refute other information you've heard or read? How so/in what way? How does it compare to another environmental problem? What questions do you have about the article? What solutions can you propose to the problem presented?