



# AP Environmental Science Summer Assignment

## Arundel High School



Welcome to AP Environmental Science! This course is multidisciplinary, blending biological, chemical, and physical science to give students a greater understanding of the natural world and their impact on the world around them. We hope that you will find this course to be interesting and enlightening. To prepare yourself for the course, we would like you to complete several assignments during the summer. These assignments will be collected on your first day back and will be graded, so please do not do these assignments at the last minute. If you pace yourself, you should find that it will not be difficult!

*AP Environmental Science (APES) students will be required to complete the following over the summer prior to the beginning of school:*

### 1. Developed vs. Developing Countries

Research and define what it means to be a developed country and a developing country.

Developed \_\_\_\_\_

Developing \_\_\_\_\_

Put a check for whether the following countries are developed or developing:

Country	Developed	Developing
China		
United States		
Germany		
India		
Spain		
Japan		
Australia		
Costa Rica		
Iraq		
Canada		

2. Calculate your "footprint" on the planet by going to the following website and following the prompts. You do not need to type in a username or password. Fill in the blanks below from the summary box when you are finished.

Website: <http://www.footprintnetwork.org/en/index.php/GFN/page/calculators/>

- What is an ecological footprint?
- Planet Earths required to support you \_\_\_\_\_

- Hectares required to support your lifestyle \_\_\_\_\_
- Which part of your lifestyle is the largest part of the pie chart? \_\_\_\_\_
- Click on the links to reduce your footprint. One reduction you could make is
- What conclusion can you draw regarding economic status, developed vs developing countries and ecological footprints?

3. **Read Chapter 1** of *Environmental Science for AP\** by Friedland and Relyea, 2012 edition to do the following assignment. Access the ebook at <http://www.highschool.bfwpub.com/launchpad/friedlandapes/607912>. Complete the registration and use the access code **4k6-pci-j3uytmbz**. On the next screen click to join the class and continue to chapter 1.

- Respond to the Multiple Choice questions on pages 23-24 (#1-10).
- Respond to the Free-Response Questions #2.

#### 4. Environmental Hot Spots

Identify and write the name of the following places on your map:

- |                    |                                |
|--------------------|--------------------------------|
| • Chesapeake Bay   | • Three Mile Island            |
| • ANWR             | • Yucca Mountain Storage Site  |
| • Three Gorges Dam | • Love Canal                   |
| • Aral Sea         | • Prince William Sound, Alaska |
| • Chernobyl        | • James Bay, Quebec            |

For each of the places, summarize their impact on the environment on the attached sheets (at the end). To do this, search for “environmental concerns” plus the name of the place in the Google search engine. Example: “environmental concerns and ANWR”

#### 5. Current Issues:

- Collect 1 article regarding environmental issues in the Chesapeake Bay.
- Include the following:
  - a summary of the article (one paragraph—3-5 sentences)
  - your opinion on the topic (one paragraph—3-5 sentences)
  - Source with Internet link, book, magazine, or newspaper citation

6. **Visit ONE natural setting** this summer that could include a local, state, or national park, wildlife refuge, beach, forest, etc. Be silent for five minutes and observe the sights and sounds around you.

- Write a two or three paragraph reflection which includes the name/location of the park & any cool observations you made, what the park is doing to help the environment, and what you hope to accomplish and learn from taking APES in the coming year.

**\*Your assignment may be either typed or hand-written.**

Good luck!! Again, please pace yourself so that the final days of your vacation are not spent completing these assignments.

**Have a wonderful summer!!**



**Sheets for #2**

**Part B: Environmental Hot Spots**

**Chesapeake Bay**

What is it? What connection does it have with the environment? What are the concerns?

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**ANWR**

What is it? What connection does it have with the environment? What are the concerns?

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**Three Gorges Dam:** What is it? What connection does it have with the environment? What are the concerns?

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**Aral Sea**

What is it? What connection does it have with the environment? What are the concerns?

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**Chernobyl**

What is it? What connection does it have with the environment? What are the concerns?

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**Three Mile Island**

What is it? What connection does it have with the environment? What are the concerns?

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**Yucca Mountain Storage Site**

What is it? What connection does it have with the environment? What are the concerns?

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**Love Canal**

What is it? What connection does it have with the environment? What are the concerns?

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**Prince William Sound, Alaska**

What is it? What connection does it have with the environment? What are the concerns?

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**James Bay, Quebec**

What is it? What connection does it have with the environment? What are the concerns?

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