“The generation that destroys the environment is not the generation that pays the price. That is the problem.”
Wangari Maathai

Introduction
As we set forth on this year’s journey, I want to stress to you how important it is that you think long-term in this class, so I’m assigning your final project now. A year before it’s due. The goal is that you and your group design and work on something that will literally change the world. Yes, you may not have the background information yet, but I know there’s things you’ve heard and/or things that you care about that you’d like to see changed. The main reason why you are getting this now is that you can design a longitudinal study if you so desire. Maybe you would like to collect data on growth, changes to local ecosystems, collection of litter and debris, or pH changes over the course of a year to enact change. If you don’t, that’s okay, you’ll be able to focus in more on this after the AP® exam, but it’s something to keep in the back of your mind.

With all of the content we will master throughout the year comes a responsibility. To give you a platitude I know you’ve heard before, “Knowledge is power.” I’m going to ask YOU to put together a proposal for how to change the world (or at least your local community). You and a group of your choosing are going to pick an issue related to environmental science for which you believe you COULD make a tangible difference. Your goal is to create a comprehensive campaign that promotes your cause and encourages others to take action. There are many ways that you can do this, but it is VERY important for you to pick a topic that your group is truly passionate about. The one thing I will say, though, is please, do not choose an elementary topic. (e.g. install solar panels without research or reasoning)

Once you have chosen a topic it is time to get to work on the basic requirements. You are responsible for researching your topic, creating a slogan or motto, designing a logo, producing a public service announcement, designing a webpage, taking action to address your issue, and writing a letter to a person or group in a position of power or authority. The project will be worth a significant part of your final grade.

Objective
To use AP® Environmental Science knowledge and direction to create a realistic proposal and action plan to address a known environmental issue and send it to someone that matters (local government, FDA, USFWS, DNR, etc.) and try to illicit a response.

Sample Topics
The topics that need addressed in environmental science are wide ranging and can suit nearly anyone’s interest. Since AP®ES involved so many disciplines you can choose a topic related to anything from economics (cap and trade) to physics (energy) to biology (population dynamics) to chemistry (water pollution) to geology (global climate change) to mathematics (LD50). When choosing a topic, it is vital that you choose something that is of great interest to all group members. Other things worth your consideration are thinking about what you can do to help your cause and thinking about what data you can collect around the issue. Local issues tend to be more engaging and are more easily influenced.

The list below can provide you with some examples of ideas and includes a few local and global issues, but is definitely not all inclusive. Once again, I encourage you to pick something you and your groupmates are passionate about!
• Reducing overpopulation of Homo sapien
• Revitalization of local rivers and/or streams
• Reducing local overconsumption

• Power plant reform
• Conservation of habitat in migration corridors
• Landscaping with native plants
• Reduction of paper usage at school

• Plastic bag bans
• Freshwater conservation
• Expansion of local wilderness areas
• E-waste

Name and Slogan
Your group needs to come up with a catchy name for your group and a slogan or motto that provides a teaser on the goals of your project. This should be creative BUT informative. After hearing it people should be curious to learn more about your group and your ideas. Acronyms are a great method and can be very engaging. For example:

• Cyclists Inciting Change thru Live Exchange, aka CICLE.
• "Center for Biological Diversity: Because Life is Good"
• "The Nature Conservancy-Protecting Nature Preserving Life"
• "Surfrider Foundation-Protecting Beaches for Over 20 Years".

Mission Statement
The mission statement your group comes up with should convey the goal of your project in one to three sentences. Examples are included below:

• Natural Resource Defense Council
  o The Natural Resources Defense Council's purpose is to safeguard the Earth: its people, its plants and animals and the natural systems on which all life depends.

• Environmental Defense Fund
  o Environmental Defense Fund is dedicated to protecting the environmental rights of all people, including future generations. Among these rights are access to clean air and water, healthy and nourishing food, and flourishing ecosystems.

• NorthEast Trees
  o To restore nature's services in resource challenged communities, through a collaborative resource development, implementation, and stewardship process.

• Kent Island High School
  o Our mission at Kent Island High School is to develop well-rounded, independently thinking individuals that can compete in a changing and diverse world. We, as a team, will do this by creating an environment where learning is valued as a continuous process. "A Collaborative Community of Learners."

Logo
Your group needs to come up with a logo that similarly conveys the goals of your project and provide an appealing image that people can associate with. You should create an original logo, although it can be a spin off or modification of an existing logo.

Public Service Announcement
Your public service announcement will be in the form of a video, poster, pamphlet, or flyer. Your goal is to get the word out, create a buzz, get people interested, form a movement!

Examples:
- MDOT Infographic
- Trash PSA
- Ozone Pamphlet
Requirements:
1. Catches people’s attention
2. Informative and educational related to the problem, solution, data
3. Clearly conveys your message

Letter
Your letter needs to be appropriately formatted and addressed to a government agency or individual and needs to include the following information:
1. The issue and your group’s position
2. History of the problem
   1. How did it develop?
   2. How was it discovered?
   3. What have other parties done to help solve this issue?
3. Causes of the problem
4. Consequences of the problem
   1. Present
   2. Future (5, 10, 25, 50 years in the future)
5. Proposed solution(s) to the problem and what this group or individual can do to help
   1. Step-by-step plan, be EXACT
6. The position of those who oppose you
   1. Rebuttal to opposing position
7. Tables, Charts, Graphs, Pictures, Diagrams, and Maps
   1. Whatever is applicable… don’t take this as you don’t have to do it!
8. Any outside sources properly quoted or cited

Requirements:
1. Covers all of the above points
2. 12-point font - something NORMAL
3. 1” margins
4. Double-spaced
5. WELL written and shows obvious signs of proofreading and polish
6. Remember, this IS going to be sent out on school letterhead to this group or person!!

Action Plan
Your action is the centerpiece of this final project, but it is also the most difficult. The goal of your action is to move the world closer to a sustainable solution. Be creative, be inspired, be inspiring, and make a difference.

Sample ideas:
- Create a lesson plan and teach students about the issue and its solutions
- Create an online petition AND get signatures from people outside of the school
  - Change.org
- Organize a demonstration or public rally
- Volunteer with an organization and document what you did
- Change your own behavior and use DATA to back up the difference you are making
- Speak at a public comment hearing or city hall meeting
- Organize a boycott
- Plan an event
  - Earth Hour
- Pressure a producer to adopt sustainable practices
- Get your ideas published into a magazine, newspaper, etc.
- Work with an appropriate government agency
- Install a prototype of what you want to do or change
- Run anything else by Mr. Hazy! Make sure that he approves it!!
Webpage
Your webpage serves as the easiest way for others to access your project. This is where everything is published, linked, and packaged. It also serves as a way to get the word out for your events, get people involved, and serves as a networking opportunity. It will also be the place where I go to evaluate your work. **Google sites** are recommended because it is free and requires no code.

Requirements
1. User friendly explanation of what your issue is and why it needs to be solved
   1. Think of this like an abstract to your entire project
2. Biographical information on group members and why this is important to them
3. GIS data using **Google Maps** or Google Earth. See example here
4. All elements of your project published
   1. Slogan clearly posted
   2. Logo clearly posted
   3. Public service announcement posted
   4. Letter posted as a PDF
5. Documentation of entire project with a focus on your action
   1. Relevant pictures, rough drafts, diagrams, etc.

Grading
This assignment is worth 100 current event points, 200 formative points, and 75 summative.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Time</td>
<td>&gt;90% of class time is used effectively.</td>
<td>80-89 of class time is used effectively</td>
<td>70-79 of class time is used effectively</td>
<td>Insufficient Effort</td>
</tr>
<tr>
<td>Name/Slogan/Mission</td>
<td>Group creates a cool name, catchy slogan, and a clear creative mission that explains the project's goals.</td>
<td>Group creates a name, slogan, and a clear mission that explains the project's goals.</td>
<td>Group creates a name, and a slogan or mission.</td>
<td>Insufficient Effort</td>
</tr>
<tr>
<td>Logo</td>
<td>Logo is creative, original, appealing to the eye, and related to the project's mission.</td>
<td>Logo is original, appealing to the eye, and related to the project's mission.</td>
<td>Logo is created and related to the project's mission.</td>
<td>Insufficient Effort</td>
</tr>
<tr>
<td>Public Service Announcement</td>
<td>PSA meets all 3 criteria listed above.</td>
<td>PSA meets 2 criteria listed above or</td>
<td>PSA meets 1 criterion listed above.</td>
<td>Insufficient Effort</td>
</tr>
<tr>
<td>Letter</td>
<td>Letter is clearly written, contains very few, if any, grammatical errors, and contains all requirements in sufficient detail.</td>
<td>Letter is well written, contains few grammatical errors, includes most sections and most requirements in sufficient detail.</td>
<td>Letter is well written, contains some grammatical errors, includes most sections and most requirements, but may be lacking detail.</td>
<td>Insufficient Effort</td>
</tr>
<tr>
<td>Webpage</td>
<td>Webpage includes all requirements listed above with a creative design, clear and easily navigable layout, and has no dead links.</td>
<td>Webpage includes all requirements listed above with a clear and easily navigable layout, there may be a dead link, and overall the site lacks polish.</td>
<td>Webpage includes most of the requirements listed above with a clear and easily navigable layout, and may have dead links but shows signs of being rushed or incomplete</td>
<td>Insufficient Effort</td>
</tr>
<tr>
<td>Action</td>
<td>The creative action has the potential to move the world closer to a sustainable future. Makes a measurable difference, is documented through pictures and rough drafts.</td>
<td>The creative action has the potential to move the world towards a sustainable future. Makes a measurable difference, is documented, but isn’t as clean or polished as possible</td>
<td>The action moves the world closer to sustainability, makes a difference, and is documented but lacks decisiveness or a clear vision.</td>
<td>Insufficient Effort</td>
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