

## APES Summer Assignment 2021-22

In preparation for this year in AP Environmental Science, please do the following:

1. **Pick up your textbook from the bookstore.**
2. **Read Chapter 1** and answer the following questions. Be prepared to discuss your answers the first day of class.
  - a. Define what is meant by “Tragedy of the Commons.”
  - b. Explain how commercial fishing could be done sustainably.
  - c. Consider the IPAT equation (pg. 13). In terms of this equation, which estimates environmental impact of a country, do you think the United States has a low, medium, or high impact? Explain your reasoning.

3. **Scavenger Hunt!**

You will complete an APES scavenger hunt by **choosing and locating 10 of the items on the list below**. Take a SELFIE with each of the items you choose and use them to create a slideshow (PowerPoint or Google Slides). Each slide should include YOU posed with the item and a very brief description of what is pictured. Include the date and location if relevant. Feel free to blend new pictures taken in your local neighborhood along with photos you may have taken in the past while traveling with your family. Be creative!

### Scavenger Hunt Items

- An autotroph and a heterotroph pictured together
- An example of nutrient cycling with description
- A biotic and an abiotic factor pictured together
- An example of a single-use plastic item and a reusable plastic item pictured together
- Side-by-side pictures, one of a freshwater ecosystem and one of a saltwater ecosystem
- An example of symbiosis; mutualism, commensalism, or parasitism
- An electric or hybrid vehicle and a gasoline vehicle pictured together
- An example of an alternative energy source in use (solar panels, wind turbine, or hydropower for example)
- An example of a weather event with description
- An example of air pollution

- Side-by-side pictures, one of a negative human impact on an area, and one of a positive human impact on an area
- An example of an ecosystem service being provided by the environment (look up what this means!)
- An example of an economic service being provided by the environment (look up what this means!)
- An example of a synthetic fertilizer and an example of an organic fertilizer.

***This will be due the Friday of the first full week of classes.***