

# AP Environmental Science Summer Assignment – Summer 2017

## Welcome to APES!!!

AP Environmental Science is a lab based course that is designed to examine ecological, biological, chemical, physical and environmental concepts and interactions. A student of this course should be familiar with local, regional and global concerns within their own environment. The objective of this summer assignment is to get you thinking environmentally and to refresh some math skills. Please note that this assignment will be collected for a grade at the end of the first week of school. All materials should be typed.

If you need to email me with questions over the summer please email at [paulsens@mhusd.org](mailto:paulsens@mhusd.org). I hope that you have an enjoyable, exciting, and educational summer! I look forward to meeting you in August! - Mrs. Paulsen

Below are the tasks you should complete this summer. All final materials should be typed, and it **will be submitted to the APES classroom on the first day of school.**

### 1. Tragedy of the Commons

Read the essay “Tragedy of the Commons” by Garrett Hardin. Here is a link:

[http://www.garretthardinsociety.org/articles/art\\_tragedy\\_of\\_the\\_commons.html](http://www.garretthardinsociety.org/articles/art_tragedy_of_the_commons.html). When you have completed the reading, please respond to the following in complete sentences:

- What is Garrett Hardin’s central idea in this essay?
- Do you personally agree with Hardin’s central idea?
- Is the “Tragedy of the Commons” unavoidable?
- Identify one “commons” in your own life (at school, home, work) and explain how it is (or is not) being managed wisely to avoid the situation described in the essay.

### 2. Think Global! (50% of Grade) You may either – PICK ONE

Choose one book from the list below to read over the summer

**-OR-**

Choose three environmental documentaries to watch (some suggestions are below, but you may choose others).

**IF YOU CHOOSE A BOOK: As you read, and after you finish... please complete the following:**

- Write down any vocabulary and/or information that is related to environmental science and define (10 Term Minimum)
- Describe any questions you may have as a result of your reading (5 Questions Minimum)
- Describe your opinion of the reading – positive/negative/neutral. Reference items in the book to support your thoughts. (Minimum 2 paragraphs)
- Relate what you have learned to your personal life – how does it affect/impact you? How does it fit into an APES course? (Minimum 1 paragraph)
- Condense the overall, take home message of the book into a Bumper Sticker slogan. Design & draw your bumper sticker.
- Then justify and defend your analysis (Minimum 1 paragraph)

(Modified from <https://www.sites.google.com/site/cougarrysci/>)

**IF YOU CHOOSE TO WATCH DOCUMENTARIES: Documentaries must be a minimum of 45 minutes in length. Documentaries should look at Environmental ISSUES, not just nature. Please complete the following for EACH Documentary.** If one you want that is not on list- just email me for approval. Many good ones coming out.

- a) Provide the name of the documentary and year in which it was released.
- b) Describe any questions you may have as a result of your viewing (3 Questions Minimum)
- c) Describe your opinion of the documentary – positive/negative/neutral. Reference items in the documentary to support your thoughts. (Minimum 1 paragraph)
- d) Relate what you have learned to your personal life – how does it affect/impact you? What information affected you the most? Will it impact how you live your life? (Minimum 1 paragraph)
- e) Choose one documentary and design a unique movie poster and slogan for it. Your movie poster should be colorful, neat, and include a slogan that identifies the take home message of the film. Then justify and defend your poster /slogan (Minimum 1 paragraph)

**Book Options – most available from your local library or on electronic media (Kindle/Nook/iPad)**

- Omnivore’s Dilemma (Pollan, 2007)
- Hot, Flat and Crowded (Friedman, 2009)
- Ishmael (Quinn, D)
- Plan B 2.0: Rescuing a Planet Under Stress and a Civilization in Trouble (Brown, 2006)
- Plan B 4.0; Mobilizing to Save Civilization (Sustainability Revised) (Brown, 2009)
- The Origin of Feces (Waltner-Towes D)
- The Big Necessity (George, R)
- A Civil Action (Harr, 1996)
- The World Without Us (Weisman, A)
- Coal River (Shnayerson, M)
- Weather Makers (Flannery, T)
- Cheap: The high cost of discount culture (Shell, 2009)
- Cradle-to-Cradle: Remaking the Way we Make Things (McDonough & Braumgart)
- Wild Ones (Mooallem, 2013)
- Silent Spring (Carson, 1962)
- A Sand County Almanac (Leopold, 1949),
- Water Wars: Drought, Flood, Folly and the Politics of Thirst (Ward, 2002)
- Cadillac Desert: The American West and its Disappearing Water (Reisner, 1986)
- Beyond Malthus (Brown, 1999)

**Suggested Documentaries - many can be found on NetFlix, Amazon Instant Video, or some even stream on the web.**

- National Geographic: Human Footprint
- National Geographic: Six Degrees Could Change the World
- 180° South
- Flow: For the Love of Water
- Tapped
- Trashed
- Food, Inc.
- King Corn
- Dirt
- Gasland
- Who Killed the Electric Car / Revenge of the Electric Car
- Manufactured Landscapes
- Vanishing of the Bees
- Fresh
- Fuel
- Bag It
- Baraka
- Blue Gold: World Water Wars
- World in Balance: The Population Paradox
- Plastic Planet
- Planet in Peril
- An Inconvenient Truth
- Empty Oceans, Empty Nets (PBS)
- Harvest of Fear (Frontline)
- The Cove
- Hawaii: Message in the Waves
- Cane Toads: An Unnatural History

**\*\*\* Be prepared to discuss your experiences from this assignment as well as the book or documentaries\*\*\***