

## AP Bio Summer Assignment

Over the summer, I'd like you to enjoy your time off, work and play hard, but not forget the academic side of your life. To this end, you are expected to start class in August with the following words an integral part of your vocabulary. I do not want you to write out the definitions, just know them backwards and forwards. You've seen them all in Bio 1.

|               |             |                      |                   |
|---------------|-------------|----------------------|-------------------|
| prokaryote    | variable    | osmosis              | dominant          |
| eukaryote     | control     | diffusion            | recessive         |
| autotroph     | hypothesis  | photosynthesis       | natural selection |
| heterotroph   | theory      | cellular respiration |                   |
| unicellular   | metabolism  | mitosis              |                   |
| multicellular | homeostasis | meiosis              |                   |

You will also choose a minimum of two books from the following reading list. Read them and write a short abstract on each, which will be due on the first day of classes in August. Your book reviews will include a discussion on the major themes of the book, a short outline of topics covered, and your reaction to the book. The essays will be typed in 10-12 point font, single spaced and be a **maximum of one page** each. Reading more than two is encouraged, if you have time. I recommend that you do NOT leave this reading for your last summer weekend. Look in the public library, college library, GMHS library or a bookstore for these books.

1. The Double Helix, Watson & Crick; the story of the two graduate students who figured out the DNA code.
2. Against the Tide, Cornelia Dean, Columbia University Press: 1999; ISBN 0-231-08418-8; destruction of beaches both by natural and human causes.
3. Virus Hunter, CJ Peters, Anchor Books, ISBN 0-385-48557-3; the story of a virus hunter and his life as an adventurous scientist.
4. Hypatia's Heritage, Margaret Alic, Beacon, ISBN 08070-6731-8; information about women who have contributed to the field of science.
5. Beautiful Swimmers, William Warner, ISBN 0-316-92326-5; watermen, crabs & the Chesapeake Bay.
6. The Demon in the Freezer, Preston, ISBN 0375-50856-2; scary book about Anthrax
7. The Botany of Desire, Pollen, ISBN 0-14-012991-X; speculation on how plants have used people to get spread around the world. Tulips use people?
8. Tales of a Shaman's Apprentice, Plotkin, ISBN 0-14-012991-X. An ethnobiologist explores the rainforest & shaman knowledge.
9. Secret Agents, Drexler, ISBN 0 14 2020615; Biological warfare.
10. The Seven Daughters of Eve, Sykes, ISBN 0 393 02018 5 DNA connections of all humans.
11. Corpse, Sachs, ISBN 7382 07713, how biology is used by criminologists to investigate time of death and find other forensic information.
12. Winter World, Heinrich, ISBN 0 06 019744 7; How animals survive harsh climates during winter.
13. Man and Microbes, Arno Karlen, Putnam, ISBN 0-87477-759-3; an easy read about the major epidemics that have plagued humans.
14. The Last Flight of the Scarlet Macaw. Story of politics and environmental degradation in Belize.

See you in August, Ms. Illingworth, [jmillingworth@smcps.org](mailto:jmillingworth@smcps.org)