

AAHS Summer 2017 - Required Reading in Science & Allied Health:

For incoming...

9th grade Biology – *Required:* Science Article Assignment. See directions below.

10th grade Chemistry I - *Required:* Napoleon's Buttons: How 17 Molecules Changed History, by Penny Le Couteur and Jay Burreson **OR** The Disappearing Spoon by Sam Kean **OR** Uncle Tungsten: Memories of a Chemical Boyhood, by Oliver Sacks **OR** The Radium Girls: The Dark Story of America's Shining Women, by Kate Moore

10th grade Anatomy & Physiology – Mrs. McKeever will be sending a *required* study guide assignment in the mail with your report card. So be on the lookout. In the meantime, there is a *Recommended reading*: The Immortal Life of Henrietta Lacks, by Rebecca Skloot

11th grade Physics– *Required:* Physics of the Impossible, by Michio Kaku

11th grade Public Health – *Recommended:* STIFF: The Curious Lives of Human Cadavers, by Mary Roach and/or The Mole People by Jennifer Toth

12th grade Cell Biology– *Recommended:* Read one of the following: Undeniable: Evolution and the Science of Creation by Bill Nye **OR** Your Inner Fish: A Journey into the 3.5-Billion-Year History of the Human Body, by Neil Shubin **OR** The Gene, An Intimate History, Siddhartha Mukherjee.

2017 Summer Science Article Assignment for incoming 9th grade Biology:

Select a scientific article that *measures something in the realm of biology* and *displays some type of data collection*.

Read the article.

- Be prepared to explain your reason(s) for the selection of this journal article. Why did you choose it?
- Be prepared to explain the author's conclusions and the data supporting that conclusion in class.
- Provide the information stated below in a written submission.

Your submission must include:

1. a copy of the article
2. a reference citation of the article in **APA format**
(<https://owl.english.purdue.edu/owl/resource/560/1/>)
3. a written analysis with the following information:
 - a) State the objective of the scientific endeavor.
 - b) State the hypothesis.
 - c) Identify the independent variable
 - d) Identify the dependent variable
 - e) State two controlled variables.
 - f) Is there a control set-up? What is it?
 - g) What is the author's overall conclusion?

The following are suggestions for your article search. If you have access to hard copy journal articles at home, feel free to access that resource:

- The Scientist (on-line free, <http://www.the-scientist.com/>)
- National Geographic
- Scientific American
- Science News
- Science AAAS

This assignment is **due on the first day of your Biology I class.**

- Fall 2017 students will submit the article to the biology teacher on Wednesday, September, 6, 2017
- Spring 2018 students will submit the article assignment to the biology teacher on the first day of the Spring semester.

2017 Summer Reading for incoming 10th grade:

Anatomy & Physiology I -

Mrs. McKeever will be sending a *required* study guide assignment in the mail with your report card. So be on the lookout.

In the meantime, *Recommended* reading for A&P I:

The Immortal Life of Henrietta Lacks

by Rebecca Skloot

Read an excerpt: http://www.amazon.com/The-Immortal-Life-Henrietta-Lacks/dp/1400052173#reader_1400052173

Honors Chemistry I -

Required reading for Chemistry I:

All sophomores are expected to select one of the following books for chemistry. Evidence (see below for options) showing proof of book reading is to be submitted on the first Monday of school, September 11, 2017 to Ms. Reilly. **The evidence is to be submitted on September 11, 2017 by all students.** You can drop it off at the chemistry lab in the morning before classes begin or at the start of lunch (10:30 to 10:45) on that day. It will count as one quiz grade. Grades will be assessed as “Maximum effort” 100%, “Moderate effort” 90%, “Some effort” 80%, “Minimum requirements met” 70%, “not turned in” zero%. Late and poor quality work will not be accepted. (That means you receive a zero!) So, be creative, enjoy the book.....but please be sure to read the book!

Book options:

- a) **Napoleon's Buttons: How 17 Molecules Changed History**
by Penny Le Couteur and Jay Burreson
- b) **The Disappearing Spoon**
by Sam Kean
- c) **Uncle Tungsten: Memories of a Chemical Boyhood**
by Oliver Sacks
- d) **The Radium Girls: The Dark Story of America's Shining Women**
by Kate Moore

Napoleon's Buttons: How 17 Molecules Changed History

by Penny Le Couteur and Jay Burreson

Each chapter is like its own unit. The book provides a review of the biochemistry you covered in Biology last year. It is a great introduction to the influence of chemistry in society.

Read an excerpt:

http://books.google.com/books?id=YC4Sm5eL4fsC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

Uncle Tungsten: Memories of a Chemical Boyhood

by Oliver Sacks

Read an excerpt: <http://www.oliversacks.com/tungex.htm>

The Disappearing Spoon by Sam Kean

Read an excerpt: <http://samkean.com/thedisappearing Spoon.html>

The Radium Girls: The Dark Story of America's Shining Women by Kate Moore

Read an excerpt:

https://books.google.com/books/about/The_Radium_Girls.html?id=NJvEDQAAQBAJ&printsec=frontcover&source=kp_read_button#v=onepage&q&f=false

Provide evidence of reading by submitting **one** of the following project assessments:

- a) Construct a Dr. Seuss style, illustrated rhyming book, incorporating themes from your selected book. Minimum 10 pages (5 pages front and back, not counting the covers).
- b) Draw colored caricatures, medium your choice, of 5 individuals based on descriptions in the book. Each character should be drawn in a setting from the book. Each drawing should be on an 8.5" x 11" piece of typing paper or its equivalent. Please identify the characters and list the pages for reference on the back of your illustrations.
- c) Construct a comic book story, minimum 10 pages (5 pages front and back), 6 panels each page, that incorporates at least five of the scientists presented in Uncle Tungsten, or 5 of the molecules present in Napoleon's Buttons or 5 elements presented in Disappearing Spoon. 5 key characters highlighted in **The Radium Girls**.
- d) If "Uncle Tungsten", "Napoleon's Buttons", "Disappearing Spoon" or "Radium Girls" was a rock band, design a T-shirt (front and back) for the 2017 Summer Tour, incorporating features from at least twelve different chapters in the book (Radium Girls is developed as Part I and Part II,