



Honors Biology
2021-2022
Summer Reading Assignment

Many times, the scientific process is perceived as a strict set of steps that must be followed. In reality, the process of science is very messy! The purpose of this summer reading assignment is to allow the student to experience the scientific process as it applies to a particular scientific issue. Students will then respond to ALL SIX of the prompts below. Students may choose one of the two books listed here. Books are easily available from Amazon (book and Kindle) and Barnes and Noble. Don't forget Half Price Books and the library!

Books to choose from are:

Rosalind Franklin: The Dark Lady of DNA by Brenda Maddox

What Mad Pursuit: A Personal View of Scientific Discovery by Francis Crick

Once finished reading, students need to respond thoughtfully and thoroughly to all of the prompts. Responses need to be supported with examples and quotes from the chosen book. All responses need to be typed. Summer work will be **DUE AUGUST 24, 2021**. These responses will be the first grade students receive for First Quarter. The summer assignment will be worth 25 points (Homework is worth 5 points).

Questions can be sent to Mr. Brooke Bauersfeld at: bbauersfeld@fenwickfalcons.org.

Grading rubric: See back of this page.

Prompts

1. Introduction: Construct one well-written paragraph summary (please do not copy the summary from the publisher!) of this book. Summary needs to include the main problem/discovery/issue of the book. (One paragraph minimum.)
2. Science often builds upon the work of others. Fully describe, including examples, two instances when the knowledge base developed by someone else further advanced the main problem/discovery/issue of this book. (Two paragraph minimum.)
3. The scientific process can be distilled into four parts: observe, hypothesize, experiment, conclude. Write AT LEAST one paragraph for each part describing how the scientific process proceeded, using examples for the book. (i.e. write at least one paragraph about each of the four parts of the scientific process with examples). (Four paragraph minimum.)
4. Give a full description of how bias was experienced/treated during the scientific process. (One paragraph minimum.)

5. All scientific research has setbacks; scientists need to have perseverance to be successful. A) Describe and elaborate on two setbacks faced by researchers and B) how each setback was overcome. (Two paragraph minimum.)

6. Scientists are not always altruistic. Describe a situation in which a researcher behaved in an unethical way. (One paragraph minimum.)

Grading Rubric for each prompt

Categories of Performance:	Emerging (1)	Progressing (3)	Advancing (4)	Mastering (5)
Topic sentence	The sentence is incomplete and does not state the main idea.	The sentence is complete, but does not state the main idea.	The sentence is complete and adequately states the main idea.	The sentence is complete and clearly states the main idea.
Supporting details	Paragraph has few detail sentences to support the main idea.	The main idea is supported with general details.	The main idea is some-what developed using mostly specific details.	The main idea is fully developed using specific details.
Concluding sentence	The sentence is incomplete and does not sum up the paragraph.	The sentence is complete, but does not sum up the paragraph.	The sentence is complete and adequately sums up the paragraph.	The sentence is complete and clearly sums up the paragraph.
Organization of ideas	Ideas in the paragraph are disorganized and do not support the main idea, causing a confusion of meaning.	A few ideas in the paragraph do not support the main idea or are out of place, causing a confusion of meaning.	Ideas in the paragraph support the main idea, but could be organized more clearly.	Ideas flow in the paragraph and clearly support the main idea, creating meaning.
Sentences and grammar	Some sentences are incomplete, choppy, or run-on; grammatical errors affect readability.	Some sentences are incomplete or run-on; simple sentences are used; some grammatical errors.	Sentences are complete; simple and complex sentences are used; few grammatical errors.	All sentences are complete and effective; complex sentences are used; no grammatical errors.
Vocabulary or word use	Some inappropriate vocabulary is used; some words are used in the wrong context.	Words are basic; some words are used in the wrong context.	All words are used appropriately.	All words are used appropriately; there is evidence of some new vocabulary being used.
Conventions	There are many errors in spelling, capitalization, and/or punctuation.	There are some errors in spelling, capitalization, and/or punctuation.	There are only a few errors in spelling, capitalization, and/or punctuation.	There are no errors in spelling, capitalization, and/or punctuation.