

AP BIOLOGY: 2016-2017
SUMMER ASSIGNMENT

Dear AP Biologist,

Welcome to AP Biology! I am glad you have enrolled in this class. This is your summer assignment. Vocabulary is a big part of this class and this packet focuses on vocabulary, Evolution and Ecology. You are to bring your summer assignment with you on our first class meeting. Your time spent learning before the start of class will allow us to have more time for the "fun" of biology, and ensure that you'll be well prepared for the AP exam in May.

You will be reading Unit 8 Ecology chapters 52 - 56 in the text that pertains to ECOLOGY. You may wish to take notes as you read. Pay attention to diagrams, figures, and tables embedded in the text & be sure to read the captions for all figures.

You should also complete the Concept Check Questions at the end of each section. Put your answers in your notebooks, this will be checked and graded. In your note books you should also have a vocabulary section. Any word that you do not know should be recorded in this section and defined in your own words. This section will be checked and graded. This procedure we will continue to be used throughout the year for each chapter.

Be aware that simply being able to answer all the questions in the packet is insufficient to prepare for the ecology & behavior unit test. You are responsible for learning all information in these chapters and applying what you've learned.

The Ecology unit exam will address concepts in all five chapters, and will be administered the second week of school, after limited discussions of summer packet content and performing a behavior lab. AP Biology is a fast paced, challenging class that requires a lot of time, the study of biology is quite exciting and I think you will enjoy this course!

Please come prepared to our first class meeting! The policy is No Late Work will be accepted.

I look forward to working with you. Get ready to think BIOLOGY!

Mrs. Raité

mrquite@unioncatholic.org

Reading Assignment Number One:

Evolution is one of the Big Ideas in this course. It is easy to accept that the mutations occurring in DNA are subsequently passed on to the next generation. Type an essay that interprets the following quote by Theodosius Dobzhandsky:

“Nothing in biology makes sense except in the light of evolution”

In your own words, define evolution. Paraphrase the quote, and connect it to the books you are going to read. What is the relationship between the ideas of your book and Dobzhandsky’s quote?

Be sure to cite chapters, quotes or passages from your book to support your thoughts. Include a paragraph that tells what you thought of the books. Limit your response to **NOT MORE than two typed double-spaced pages** with 1” margins top and bottom and 1” left and right, also please use Times New Roman size 12 font.

The book you are to read is:

The Beak of the Finch: A Story of Evolution in Our Time
Book by Jonathan Weiner

Reading Assignment Number Two:

Beak of the Finch

Answer these questions in essay format. You may combine questions in your paragraphs. Be concise, just answer the questions, no long explanations are needed. You are to assume the reader is knowledgeable of the concepts, unless the question specifically asks you to explain.

1. What is the scientific difference between evolution and natural selection?
2. What is variability and what part does it play in natural selection?
3. What made Daphne and the Galapagos unique? Why were they the perfect places to prove Darwin’s theory?
4. Why are the Grants’ studies so distinct and therefore so valuable?
5. How did Darwin’s stay on the islands change his ideas?
6. How important was the dry season to the study?
7. Discuss some of the evolutionary effects of introducing non-native species to an area (e.g. Ash Borer, Asian Ladybugs)
8. Compare and contrast the work that the Grants’ did and earlier scientific studies on the theory of evolution.
9. What kept the Grants coming back to the islands? What does it take to do this work? Do you admire the people who do this work?
10. Have you ever seen hundreds of birds on a telephone wire? Do you look at them the same way since you read the book?