AP Biology Summer Work 2024

Purpose: To have a background knowledge and understanding of the course prior to entering the classroom. This information is extremely important in order to complete the course work throughout the school year and prepare for the AP exam in May.

Due Date: The below assignment will be due on the first day that class meets, depending on your schedule.

Late Policy: Assignments submitted after the assigned due date are subject to the school's late work policy.

This assignment will account for a Level 3 Assignment for your grade for Marking Period 1.

Assignment: Please complete in this order and on a single Google Document. Be sure to divide your document into sections according to the part of the assignment you are completing.

Part 1:

Introduction AP Biology Unit 1 - <u>Chemistry of Life</u> - Please watch the following video and take notes on important topics in bulleted form. In addition, please provide a one paragraph summary of the video.

Part 2: Introduction to AP Biology Unit 2 - <u>Cell Structure and Function</u> - Please watch the following video and, in a bulleted format, explain the function of each cell structure with detail.

Part 3: Introduction to AP Biology - <u>Ecology</u> - Write a detailed summary about the Ecology video. In addition, come up with 3 higher order thinking questions that can be asked about the information.

Part 4: Research The Cell Cycle. Create a Google Slide presentation of each step and what takes place in each.

Part 5: Research and provide a detailed answer to the following questions:

- 1) How and why is statistics an important component of environmental factors?
- 2) How do we analyze data in science?
- 3) What is standard deviation and how is it calculated?
- 4) What are central tendencies in data? How can they help us analyze data trends in a population?