

Odem-Edroy Pre-AP Biology Summer Assignment 2016



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| Course | Pre-AP Biology |
| Teacher Name & Email Address | Mrs. Esquivel Esquivela@oeisd.org |
| Assignment Title | Summer Assignments: <i>Writing Portion-The Four Big Ideas of Biology</i> |
| Date Assigned | May 16, 2016 |
| Date Due | Writing Portion- ELECTRONICALLY by 11:59 p.m. on July 15, 2016 - NO EXCEPTIONS, NO EXTENSIONS. ASSIGNMENTS MAY NOT BE GIVEN TO THE TEACHER DIRECTLY OR DROPPED OFF AT THE OFFICE. |
| Objective/Purpose of Assignment | To introduce vocabulary/concepts of biology and to begin to understand the relevance of the subject by connecting the major themes in biology to the events occurring in the real world. |
| Description of how assignment will be assessed | Will be graded and awarded as a test grade. Also will allow entry into Pre-AP Biology for the 2016-2017 school year |
| Tools/Resources needed to complete assignment | Computer, Summer Packet, science sources via internet, books, magazine, documentaries, etc.. |
| Estimated time allotted to complete assignment | 2 months |

Dear Forthcoming Pre-AP Biology Student,

Welcome to Pre-AP Biology! The two central goals of Pre-AP Biology are to help you develop a conceptual framework for modern biology and to gain a deeper appreciation of science as a process. The Pre-AP Biology curriculum centers around four BIG ideas and you will need to know these and understand how they relate to each other.

The 4 BIG ideas are as follows:

***Big Idea #1:** the process of evolution drives the diversity and unity of life.

***Big Idea #2:** biological systems (*organisms and/or cells*) utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.

***Big Idea #3:** living systems (*organisms and/or cells*) store, retrieve, transmit, and respond to information essential to life processes.

***Big Idea #4:** biological systems (*organisms and/or cells*) interact and these systems and their interactions possess complex properties.

What you need to do over the summer:

Write an essay explaining what each BIG Idea means and elaborate on its meaning by connecting it to any of the biological content you have previously learned or scientific discoveries in the news. Also, find and explain one connection between each BIG Idea AND ONE other BIG idea.

Requirements:

The essay should be a minimum of 4 pages TYPED with no maximum number required. Works cited at end of essay on a separate page.

* cover page listing Title, Name, Teacher, Subject, Date

*Font: Times New Roman

*Margins: 1" (standard page form)

*Font size: 12

*Double spaced

Please submit your completed essay to [Turnitin.com](https://www.turnitin.com) for approval into the class.
 Must receive at least 22% originality.

How to pick creditable resources for essay evidence:

Source Evaluation Cheat Sheet

Examples of sources that are often the most credible:

- Official government websites
- Institutional sites that represent universities, regulatory agencies, governing bodies, and respected organizations with specific expertise (e.g., the Mayo Clinic)
- Peer-reviewed journals
- Reputable news sources

Examples of sources that are often considered less credible:

- Blogs
- Web forums
- Individual or business websites
- Materials published by an entity that may have an ulterior motive

| Factors to consider | Least reliable | Possibly reliable | Most reliable |
|---------------------|-----------------------|--|---|
| Type of source | Unfamiliar website | Published material | Official websites, institutional sites, academic journals |
| Author's background | Uncredited | Educated on topic | Expert in the field |
| Date published | None | Outdated | Recently revised |
| Depth of review | Controversial reviews | Good public response; general approval | Peer-reviewed by reliable sources |
| Sources cited | None | Credible sources | Citations referencing other well-cited works |
| Objectivity | Clearly biased | Sponsored source | Balanced, neutral |