

Biology Summer Experience

Welcome to Biology! I am super excited at your decision to be a part of what will be a challenging, yet interesting and rewarding course for you. Our biology class will cover an entire year of various life science topics and at times it may seem challenging, but don't worry; we'll take it one step at a time. Put forth some effort and you will be successful!

My name is Ms. Shea Polakow and I will be your teacher. Biology is both dynamic and exciting because it is always changing! I hope you are looking forward to a fun year ahead. I truly enjoy biology and I hope this comes across as we take this journey together.

Directions: Choose ONE option from the following list of biology summer assignment experiences.

In order to get credit for your assignment, you must follow the directions and submit the evidence that is required in the first week of class. All materials must be in non-electronic format for this particular assignment --you should feel free to hand-write, type and print, or some combination. You will share your work with your fellow classmates. Make sure your work is intellectually your own.



**1. DISCOVER COLOR
NATURE**



IN



Go to any store that sells paint (Home Depot, Lowes, Ace Hardware, etc) and collect a sample paint strip (or strips) with at least a total of 5 paint swatches of various neutral colors.

For each color, go outdoors to a natural area, or even your neighborhood, and find something in nature that is exactly the same color hue at the time of collection.

Cut the color swatch from the store out and glue or tape it along with the color (object/item) from nature to a small piece of white poster.

Try to identify the object and label each individual colored nature item.

Write an essay or reflection (1 page) about what conclusions you can reach about "color in nature" as a result of engaging in this experience.

Required Evidence (1) Poster board with five color swatches and colored objects from nature taped together. (2) Attempted identification of the natural objects. (3) A one-page reflection or essay.



2. BURY IT

Take an athletic sock and fill it with various forms of garbage (soft drink can, banana peel, paper, etc).

Record in a data table some descriptive observations of the things you put in the sock.

Some time before June 10th, go outside and bury it approximately 2 feet deep.

Three to five days before school starts, dig up the sock and examine the objects inside. (what types of materials biodegrade in soil-decompose when buried.)

In the same data table, record your descriptive observations of the objects. (Organic versus inorganic material)

Write a 150 word summary of the results and compare the sock to what you think happens in landfills where our trash is taken. (Waste management engineers use the process of biodegradation to minimize the amount of space that landfills take up).

Required Evidence: (1) A data table with descriptions of trash before and after burying including illustrations or pictures. (2) A 150-word summary of what happened and the comparison to landfills.

3. ENVIRONMENTAL SCIENCE ZOO OBSERVATION

An animal's habitat is an environment that provides the food and shelter required for the animal to make its home.

Take a trip to a zoo or animal rescue center. Make sure you get a receipt.

Choose five animals. For each animal, visit the exhibit and observe the habitat created by the zoo and read about the natural habitat.

Write a description of the habitat that they live in naturally. What adaptations (physical and/or behavioral) help the animals survive in their environments?

Each habitat description should be at least 75 words or more. Include a picture or illustration for each.

Required Evidence: (1) A receipt showing zoo/rescue center admission. (2) Five different 75 or more word description and illustration of an animal's habitat. Make sure you discuss how the animal is adapted to its real-life environment.

Definition of adapted

1. any alteration in the structure or function of an organism or any of its parts that results from natural selection and by which the organism becomes better fitted to survive and multiply in its environment.
2. a form or structure modified to fit a changed environment.

3. the ability of a species to survive in a particular ecological niche, especially because of alterations of form or behavior brought about through natural selection.

