

## Biology Summer Assignment 2019

Welcome to Biology!

I am looking forward to working with all of you this year. This summer assignment will hopefully be fun for you and help you feel more prepared for class this fall! Below are the instructions for your summer assignment. It is broken down into four parts. This assignment is **due on the first day of class**. If you have any questions, please email me directly at [rdziopa@ichspride.org](mailto:rdziopa@ichspride.org).

Have fun researching!

Ms. Dziopa

### Part 1: Vocabulary Terms

In a notebook, please define the following vocabulary terms listed below. You can write down these terms on the first few pages or the last few pages of your notebook. These words will show up through out the year. You can use your notebook as a dictionary which can help you during class time!

1. Abiotic
2. Biology
3. Biotic
4. Biodiversity
5. Cell
6. Cell Membrane
7. Cell Theory
8. Cellular Respiration
9. DNA
10. Ecosystem
11. Evolution
12. Experiment
13. Extinction
14. Gene
15. Genetics
16. Global Climate Change
17. Global Warming
18. Homeostasis
19. Hypothesis
20. Kingdom
21. Mitosis
22. Mutation
23. Natural Selection
24. Niche
25. Nucleus

- 26. Organelle
- 27. Organ Systems
- 28. Photosynthesis
- 29. Symbiosis
- 30. Vaccine

### Part 2: Observations

After defining the above terms, you are more familiar with what abiotic and biotic mean. These terms help us determine what things are living and non-living in the environment. For this part I want you to go outside and make a list of the living and non-living things you see. Please write down your observations in the table below. Try to get at least 10 of each!

Abiotic	Biotic
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.

### Part 3: Research

Sadly, there are many endangered species in the world today. One of the main reasons for this is because of how humans treat the planet. Your job for this part of the summer assignment is to select an endangered animal to "speak for" and try to convince others that it should be saved. You will research the following: their habitat and niche, feeding and reproductive patterns, reasons for becoming endangered, protective actions being taken, and whether or not the conservation steps are working. You **must** fill out the graphic organizer that is below to help you organize your research information. You can either print this out or write this in your notebook. Here are two websites that you can use to find a species to research: <https://a-z-animals.com/animals/endangered/> or <https://www.iucnredlist.org/>. You will share with classmates what you learned and discuss the chosen endangered species in small groups on the first few days of school!

Endangered Species Name:	
What does this animal look like?	
Habitat and Niche:	
Feeding Patterns:	
Reproductive Patterns:	
Why did they become endangered?	
What are we doing to help protect them?	
Is this protection plan(s) working?	
Fun Fact(s) about the species:	

#### **Part 4: Get Out Into Nature! (Highly recommended, but not required)**

In order to gain a deeper appreciation for biology, it helps to get up close and personal with Mother Nature once in a while. Here are some suggestions for places to go and visit this summer:

1. Branch Brook Park
2. Eagle Rock Reservation
3. Garrett Mountain Reservation
4. Great Swamp National Wildlife Refuge
5. Lakota Wolf Preserve
6. Loantaka Brook Reservation
7. Paterson Great Falls National Park
8. The Raptor Trust

If you take a trip to any of the places listed above please take pictures and document any wildlife you see! Feel free to email me if you need help with directions to any of the locations. 😊