2.02 Limiting Factors Assignment

Go to FILE and DOWNLOAD AS, then choose a file type that works for you.
Google Drive users can go to FILE and MAKE A COPY.
Files can also be downloaded from the last page of the lesson.

Name:

Type your name and the date in the table below.

Student Name	
Date	

Objective:

The purpose of this assignment is to investigate various limiting factors. Using the **Limiting Factors Lab**, you will investigate the impact of predators, pollution, and food on a population of cricket frogs.

Hypothesis (6 Points):

In this section, please include the if/then statements you developed during your lab activity. These statements reflect your predicted outcomes for the experiment.

- If predators are *increased*, then the cricket frog population will **CHOOSE ONE** over the span of five years.
- If pollution is *increased*, then the cricket frog population will **CHOOSE ONE** over the span of five years.
- If the amount of food available is *increased*, then the cricket frog population will **CHOOSE ONE** over the span of five years.

Data (14 Points):

*Follow the procedures in the **Limiting Factors Lab**. Record your data in **Data Table One**.*
To calculate the amount of change, use this calculation: Beginning Frog Count – Ending Frog Count = Amount of Change

Data Table One: Limiting Factors of Cricket Frogs

Limiting Factor	Beginning Frog Count	Ending Frog Count	Overall Population Change	Amount of Change
Example	*10,000*	*3,000*	*decreased*	*7,000*

Low Predators			CHOOSE ONE	
High Predators			CHOOSE ONE	
Low Pollution			CHOOSE ONE	
High Pollution			CHOOSE ONE	
Low Food Source			CHOOSE ONE	
High Food Source			CHOOSE ONE	

Data Analysis (14 Points):

Test (independent variable): Number of predators, amount of pollution, amount of food
Outcome (dependent variable): Size of cricket frog population

Use your data to answer the questions.

Questions	Place your answers below.
1. Which limiting factor impacted the cricket frog population the most? Use evidence from your data chart to support your answer.	
2. Which limiting factor impacted the cricket frog population the least? Use evidence from your data chart to support your answer.	

Conclusion (6 Points):

Use the lesson and your assignment to answer the questions. Please write in complete sentences.

Questions	Place your answers below.
1. Choose one abiotic limiting factor from the lab. Why does this factor limit the cricket frog population?	
2. Choice one biotic limiting factor from the lab. Why does this factor limit the cricket frog population?	
3. If you remove the cricket frogs from this ecosystem, how will this change impact the alligator population?	
4. If you remove the cricket frogs from this ecosystem, how will this impact the mosquito population?	