

BIOLOGY TRIMESTER 3

Unit 6 - Climate Change FINAL Performance Task

*This project is a culmination of your entire year in Biology. It will be weighted in your final grade as the **largest task of the year.***

Please invest a strong effort and engage in persistence, critical thinking and innovation.

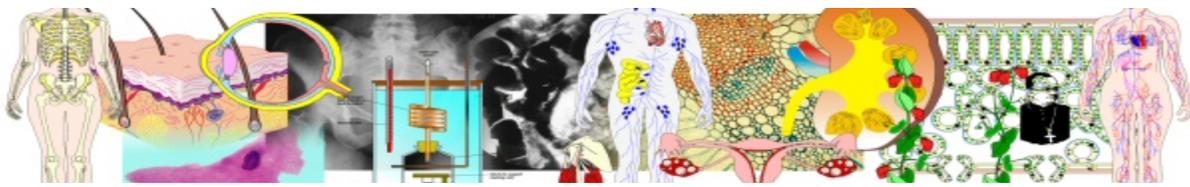
Objective:

Individually, design a research project developed around a specific problem, solution or result from the question:

How is the climate changing?

Below is a list of the brainstorm from class:

- | | | | |
|---------------------|------------------|-----------------|-------------|
| Pandas | Coffee | Fish | Dead Zones |
| Chocolate | Bamboo | Plants | Bees |
| Drought | Hurricanes | Tornadoes | Butterflies |
| Typhoons | Cyclones | Wildfires | Pollinators |
| Mudslides | Diseases | Warming Oceans | Crops |
| Ocean Acidification | Floods | Runoff | Infections |
| Greenhouse Gases | Fossil Fuels | Pollen | Storm Surge |
| Allergies | Air Pollution | Overharvest | Shell |
| Erosion | Overfishing | Deforestation | Extinction |
| Invasive Species | Bird Migration | Whales | Sharks |
| Sea Levels Rise | Ice Caps Melting | Avalanche | Rainforests |
| Ice-Albedo Effect | Water pollution | Growing Seasons | Humans |
| Photosynthesis | Marshes | Beaches | Erosion |
| Human Population | Coral Bleaching | Cancer | Automobiles |
| Energy | Oil | Horseshoe Crabs | Coal |
| Insects | Human Health | Fossil Fuels | Plastics |
| Alternative Energy | Solar | Wind | Geothermal |
| Hydropower | Garbage | Recycling | Oil Spills |
| Coastal Cities | Dolphins | Turtles | Recycling |



BIOLOGY TRIMESTER 3

- You have **FIVE** class periods to **COMPLETE** your **TASK!!!!**
- **May 29th & 30th** you will present to your peers.
- **The Eco-Fair is Thursday May 31st.**
- I expect a commitment to completing the activity assigned for the day. **PRIORITIZE!!!!**
- It is important to work outside of class for **EXEMPLARY** work.

**IT'S NOT ABOUT
"HAVING" TIME.
IT'S ABOUT
MAKING TIME.**

DAY ONE:

1. Begin by creating a Google Doc to store your information and notes. SHARE the Google Doc with Ms. Smith IMMEDIATELY! wbbcoachsmith@gmail.com
2. Select a topic you are going to focus on.
3. Begin research on the topic and copy the links to your Google Doc. By the end of class, complete the Google Form here. <https://tinyurl.com/ybku3mnm>
4. You will need to know your topic and be able to list at least **THREE** research sites for evidence and **DATA**.

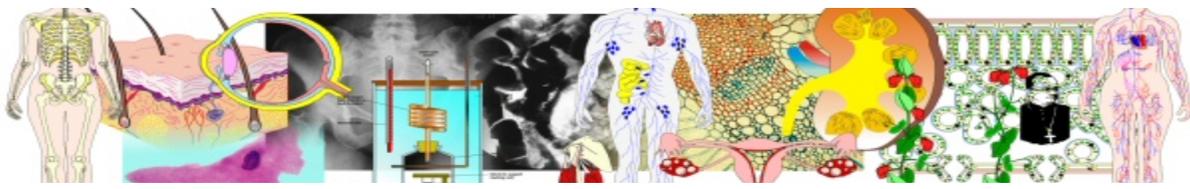
DAY TWO:

1. Research evidence using collected data from class as well as researched data to answer the question **HOW IS THE CLIMATE CHANGING**, with respect to your topic.
2. **Place all data, analysis and predictions in your Google Doc!!!!**
3. Be able to show the data in the appropriate form, analyze and interpret your data.
4. Evaluate the data for reliability (either the data collected or researched).
5. Show that you can predict potential results, think about the future. Reference the Analyzing & Interpreting Data rubric below. I will give feedback on your Google Doc.

2 - ANALYZING & INTERPRETING DATA - SEP

- 2A. I CAN SHOW DATA IN THE APPROPRIATE METHOD.
 2B. I CAN DETERMINE THE RELATIONSHIP BETWEEN THE DATA.
 2C. I CAN ANALYZE DATA TO FORMULATE A CLAIM.
 2D. I CAN EVALUATE RELIABILITY OF DATA.
 2E. I CAN PREDICT POTENTIAL RESULTS USING DATA SETS.

XE - ALL 5
 COXE - AT LEAST 4
 CO - AT LEAST 3
 EM - AT LEAST 2
 NY - AT LEAST 1



BIOLOGY TRIMESTER 3

Unit 6 - Climate Change FINAL Performance Task

*This project is a culmination of your entire year in Biology. It will be weighted in your final grade as the **largest task of the year**. Please invest a strong effort and engage in persistence, critical thinking and innovation.*

Objective:

Individually, design a research project developed around a specific problem, solution or result from the question: How is the climate changing?

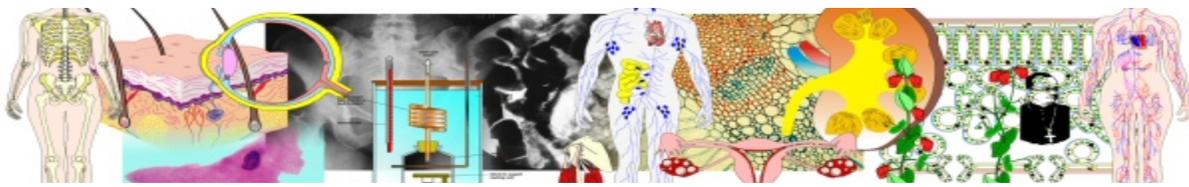
DAY THREE:

1. Create a plan to engage in argument from evidence using the topic selected.
2. In your Google Doc, title a section called Engaging in Argument.
3. Compare and evaluate competing arguments of climate change in regards to your topic. List BOTH sides.
4. Determine the positives and negatives of the competing arguments.
5. Provide critiques on both sides.
6. Create a claim based on evidence for an explanation.
7. List possible solutions to the real-world problem.
8. Be ready to explain and defend your position during the Eco-Fair. (Use the rubric below)

1 - ENGAGING IN ARGUMENT FROM EVIDENCE - SEP

- 1A. I CAN COMPARE AND EVALUATE COMPETING ARGUMENTS.
- 1B. I CAN DETERMINE THE MERITS OF COMPETING ARGUMENTS.
- 1C. I CAN RESPECTIVELY PROVIDE OR RECEIVE CRITIQUES.
- 1D. I CAN CONSTRUCT AN ARGUMENT BASED ON EVIDENCE.
- 1E. I CAN EVALUATE COMPETING SOLUTIONS TO REAL-WORLD PROBLEMS.

XE - ALL 5
 COXE - AT LEAST 4
 CO - AT LEAST 3
 EM - AT LEAST 2
 NY - AT LEAST 1



BIOLOGY TRIMESTER 3

DAY FOUR:

<https://www.youtube.com/watch?v=HwELajFteTo>

1. Think about the question, **WHAT IS THE MOST IMPORTANT THING I LEARNED?**
2. How will you share that with your classmates and community?
3. Options include but are not limited to: Demonstration, Video, Statistics, Action, Presentation, Handouts....
4. Complete the Google form and include materials needed.

<https://tinyurl.com/yd382msn>

DAY FIVE:

1. In your Google Doc, write an ABSTRACT summarizing your research. The document should be a well written paragraph answering the question **How is the Climate Changing?** and summarizing your project.
2. Be sure to include your understanding of the Ecosystems Rubric below.
3. **Complete your Presentation!!!!**

6 - ECOSYSTEMS - DCI

- | | |
|---|---|
| <p>6A. I CAN IDENTIFY THE COMPLEX SET OF INTERACTIONS WITHIN AN ECOSYSTEM.</p> <p>6B. I CAN EXPLAIN HOW ECOSYSTEMS CAN BE ANALYZED ON VARIOUS SCALES.</p> <p>6C. I CAN EXPLAIN THE DIFFERENCE BETWEEN MODERATE AND EXTREME EFFECTS ON AN ECOSYSTEM.</p> <p>6D. I CAN DESCRIBE HOW AN ECOSYSTEM CAN MAINTAIN SUSTAINABILITY.</p> <p>6E. I CAN ILLUSTRATE THE EFFECT OF CHANGING ONE FACTOR OF THE SYSTEM ON THE ENTIRE SYSTEM.</p> | <p>XE - ALL 5</p> <p>COXE - AT LEAST 4</p> <p>CO - AT LEAST 3</p> <p>EM - AT LEAST 2</p> <p>NY - AT LEAST 1</p> |
|---|---|

**BE READY TO PRESENT TO A SMALL ROUNDTABLE
TUESDAY MAY 29th
OR
WEDNESDAY MAY 30th**