**Ecology Unit – Culminating Project**

***For a final project for this unit, you will be using technology to examine a particular biome in greater detail and report your findings to your classmates.***

**Choose ONE of the following biomes to research:**

* Tundra
* Grassland
* Tropical Rain Forest
* Desert
* Taiga/Boreal Forest
* Chaparral
* Fresh Water
* Salt Water
* Temperate Forest
* Savanna

**Your project must include the following:**

* Summer & Winter Climate Information
* One example for each type of symbiotic relationship
* Limiting factors – 2 density-dependent and 2 density-independent
* 3 animals and a specific adaptation for survival for each animal
* 3 plants and a specific adaptation for survival for each plant
* Food web with 10 organisms
* Energy pyramid with specific organisms (you must also show the amount of energy loss)
* Discuss one major human impact on this particular biome (pollution, pesticides, global warming, deforestation, overpopulation, etc.)
* Discuss EITHER the water cycle or carbon cycle in relation to this biome
* Discuss EITHER the nitrogen cycle or phosphorous cycle in relation to this biome
* Cite 5 specific sources where you gathered your information

**Choose ONE of the following project options:**

* **Travel Blog** 
  + Using Blogger or another site of your choice, create a detailed travel diary of your “journey" through your chosen biome. All blog entries should be detailed and accurate with pictures included. Be sure to include all the components listed above but be creative and make your project eye-catching and unique.
* **Video**
  + Using software of your choice, create a professional looking video detailing your “journey” through your chosen biome. You can choose any format you like for this video (ex: news report, national geographic exploration video, video diary of your travels, etc.). Be creative but be sure to include all the components listed above.
* **Website**
  + Using Wix, Weebly, Google sites, or another website program of your choice, create a website for your chosen biome. The website should be colorful, eye-catching, and informative. Be sure to include all components listed above on your site. You can also include links to informative sites, embed videos, or add any other additional resources that you think will complement your site.
* **Poster**
* **Power Point**
* **Prezi**

**TOTAL POINTS: 100 PTS >>> See Rubric for point breakdown**

**Ecology Unit – Project Rubric**

|  |  |  |  |
| --- | --- | --- | --- |
| **REQUIRED SECTIONS** | **Points Earned** | **Points Possible** | **COMMENTS** |
| **Summer and Winter Climate Information** **for your assigned Biome** |  | 10 |  |
| **One example of each type of Symbiotic Relationship**  **Parasitism**  **Mutualism**  **Commensalism** |  | 10 |  |
| **3 animals and a specific adaptation for survival for each animal** |  | 10 |  |
| **3 plants and a specific adaptation for survival for each plant** |  | 10 |  |
| **Food Web with 10 organisms** |  | 10 |  |
| **Energy Pyramid with specific organisms (you must also show the amount of energy loss)** |  | 10 |  |
| **Discuss one major human impact on this particular biome (pollution, pesticides, global warming, deforestation, overpopulation, etc.)** |  | 15 |  |
| **Discuss EITHER the Water Cycle or Carbon Cycle in relation to your assigned biome** |  | 10 |  |
| **Discuss EITHER the Nitrogen Cycle or Phosphorus Cycle in relation to your assigned biome** |  | 10 |  |
| **Cite 5 Specific Sources** |  | 5 |  |
| **TOTAL** | **\_\_\_\_\_** | **/100** |  |