Biomimicry Project Schedule

Day 1: Defining the Problem and Researching Solutions

<u>Objectives:</u> Define Biomimicry and evaluate the benefits of designs that mimic nature.

Define/redefine the problem in your own words
Example: People would like hovercrafts.

Ask the question in biological terms.
Example: How do various animals hover?

Research the problem and possible solutions.

Record your ideas/information in your science notebook.
Details!!!!!!!!!!!

List questions you have and information needed to solve it.
Example: How do current hovercrafts work?
Which animals hover? Which animals must hover to survive?
How does a hummingbird hover?

Define *sustainability.*

Describe why our current technology and way of life is not sustainable.

List Nature's Nine Laws, described by Janine M. Benyus.

Identify and describe an example: Human need, Nature's solution, Biomimetic solution.

List topics and keywords to use in your research.

Three CREDIBLE sources are required. (APA format)

Day 2/3: Design

Objectives: Define a human problem that could be solved using biomimicry.
Generate research questions about the problem.
Locate and attribute at least three credible sources.

Propose a solution to the problem by using Biomimicry.
Example: Design a hovercraft similar to how hummingbirds hover near a flower.

Design an example of your solution.

Label all the parts of your design and materials used.

Include estimated measurements in your design.

Explain why you think this solution will work.

Describe how your design was inspired by nature.

Day 4/5: Presentation

<u>Objectives: Design a product that uses biomimicry.</u>
<u>Explain the nature-inspired features of the product and why they were selected.</u>

Compile and communicate your problem and design to others on a presentation. (See rubric)