

Engineering Through Biomimicry

A modified engineering design cycle

1. Research

*What do you want to mimic?
How does it work in this biological system?*

2. Imagine Imitations

*How could you copy this system with the
materials you have available to you?*

3. Choose and Plan

Which of your imitations do you like the best? What will you create?

4. Duplicate and Prototype

Describe how you've copied the living system (sketch, measure, quantify!)

5. Test and Evaluate

- *What functions or traits did you leave behind in your replication of this system?*
- *What are the weaknesses of your design?*
- *How is your replication superior?*

6. Find A Problem That Your Design Could Fix

What problem could your product help solve?

How would you have to modify or redesign your product to solve this problem?