



Biomimicry: Innovation Inspired by Nature
Learning From Nature
OBSERVE, ABSTRACT & IDENTIFY

Assignment 3

Instructions:

- complete assignment in your journal
- Note: research 2 different "discoveries"
- turn in journal in next class (Sept 18)

- 1) **RESEARCH:** Find a source of different magazines that focus on wildlife and/or natural systems. These may include, but are not limited to, "serials" found in the library (i.e., National Geographic, Natural History, etc). You can find loads of new and archived magazines on the 5th floor of the library. Or perhaps you have your own collection?
- 2) **DISCOVER:** Find a species or system that is fascinating to you from a magazine. The best way to do this is to just begin flipping through pages and seeing what catches your attention and then skim the article.
- 3) **OBSERVE:**
 - Record the name of the species, process, or system that you have "discovered" into your journal (e.g., Namibian Desert Beetle)
 - Record the magazine citation (magazine title, article title, volume, year, page numbers of entire article).
 - In one sentence, describe what makes this organism, process, or system so amazing to you (e.g., this insect is able to collect water from air (fog) in the desert).
- 4) **ABSTRACT:** Identify one function this creature or system performs that you think is especially fascinating.
 - Record the organism/system function and, if described, the mechanism used to perform the function in a brief sentence (e.g., function: water collection; mechanism: hydrophilic and hydrophobic microbumps).
- 5) **IDENTIFY:**
 - Brainstorm up to four different industries and/or companies that have products or processes that have the same need as the function you've identified from your chosen organism/system (e.g., heating and cooling industry: air conditioners & dehumidifiers).

Remember: brainstorming is about creativity NOT being right. Have fun with it. Try to think broadly about the potential application of organism/system function.
- 6) **IDENTIFY:**
 - Write a short headliner that summarizes your "discovery" in a captivating way.
- 7) **REPEAT STEPS 2-6.**
 - You'll be "discovering" 2 different species/systems.