NAME: _____DATE:_____CLASS:_____

Build-the-Box Activity

Objective

This activity will help you determine and investigate the constraints related to your biomimicry design challenge.

Guidelines

1. Join your design team members and get a large piece of paper and markers.

2. Draw a large box in the center of the paper and write your design question in the middle of the box.

3. Identify four design constraints that pertain to your project and record one on each side of the box. (If you have more constraints, you will need to create a different shape for your graphic or use a checklist, but try to focus on at least four broad constraints.)

4. Investigate each constraint, clarifying definitions and questioning whether each of them is truly non-negotiable, or if there might be a creative way to work around it. Write notes and ideas to capture your thinking about the constraints and how they may impact possible solutions. Consider ranking them in order of importance.

5. Join the entire class to share and discuss your ideas. Then modify or refine your design constraints as necessary.

Build-the-Box Activity, continued

Sample Build-the-Box Graphic

must use reclaimed materials

MATERIALS

TIME

BUDGET

must be
implemented
next semester

How might we reduce
water waste when irrigating
our school garden?

must cost
less than
$50 to build

CONDITIONS

must be able to function
outdoors in all weather
conditions