Design Challenge – Biomimicry

Scenario

You are working with a team of engineers from a structural engineering company that specializes in the design and manufacturing of single and multiple family living structures. Your team's challenge is to design a building hand that utilizes form of something found in nature to solve one of the following problems associated with living spaces.

Heating and air conditioning	Water proofing
Structural strength	Self cleaning
Energy Production	

Design Constraints

• Time: You will be expected to complete this design challenge from start to engineering analysis in a week!

Materials: Since we will not be actually building prototypes, I am not giving you a materials list. Just imagine that you can use any building material that is currently available or one of your own design.

Project Deliverables

Deliverable	Points Assigned	Assigned Date	Due Date
Tower Construction Effort Form	100- Classwork grade	1/20/15	1/20/15
Defining the Problem Form	100- Classwork grade	1/20/15	1/21/15
2 of the following 3 forms			
Patent Search Form	50- Classwork	1/21/15	1/22/15

Standards and Codes Search Form	50- Classwork	1/21/15	1/22/15
Reverse Engineering Form	50- Classwork	1/21/15	1/22/15
Brainstorming Sheet	100- Classwork	1/22/15	1/22/15
Evaluating Alternative Rubric	100- Quiz Grade	1/23/15	1/26/15