Engineering Design Process (EDP)
What is it?

The Engineering Design Process is a cyclical process that develops skills in defining a problem, defining the criteria and limitations, decomposing systems (part-whole), generating solutions, drawing and creating representations, experimenting, and optimizing their design. Students learn to modify the world and adapt it to their needs. **"Engineering Competencies" National Academies Press, 8 Sept. 2009. Web. 04 Mar.2011 http://www.nap.edu/openbook.php?record_id=12635&page=120**

ASK	❏ Understand the problem clearly ❏ State the conditions and limitations ❏ Obtain information from prior knowledge
IMAGINE	❏ Brainstorm idea(s) ❏ Relate ideas to the problem
PLAN	❏ Choose one idea that is testable ❏ Draw a useable prototype design (multiple views). ❏ List materials that are affordable and available
BUILD/CREATE	❏ Follow the plan ❏ Add to the original design to make it work
TEST/IMPROVE	❏ Collect and record data accurately ❏ Analyze data by showing patterns or relationships ❏ Review data to make decisions about redesigning ❏ Improve/Tweak as time allows
SHARE	❏ Present your solution to your peers ❏ Gain input for your design from others