**Engineering Design Process Notes**

* What is it?
  + A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ method.
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ use design processes to find \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to technological problems.
  + Most products were probably developed using process like this one.
* Solution could be an…
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: Improving upon an existing process or product
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: Creation of a product or process for the first time
* \_\_\_\_ STEPS arranged in a \_\_\_\_\_\_\_\_
  + It is likely that you will move through the loop \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ before solving a problem in the \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Step 1:
  + \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_: a written plan that identifies a \_\_\_\_\_\_\_\_\_\_\_\_ to be solved, its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (desired specifications), and its \_\_\_\_\_\_\_\_\_\_\_\_\_ (limitations).
  + Gather information
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_how we can solve the problem.
  + May want to consult an \_\_\_\_\_\_\_\_\_\_\_\_\_ in the field or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: library, books, magazines, articles, web sites, encyclopedias, research reports, etc.
  + Make a \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of all the information gathered and cite the sources!
* Step 2:
  + \_\_\_\_\_\_\_\_\_ ideas should be written down, even the ones that seem \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Ideas need to be down on paper in some way so they are not forgotten
* Step 3:
  + Narrow down your list of ideas
  + Choose the\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to pursue
  + Use a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ to choose a final solution
    - \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ A tool used to compare ideas against one another using specific \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + A good way to design the solution is to create a series of sketches that increase in detail.
  + \_\_\_\_\_\_\_\_ \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: list of materials needed to construct the solution (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_).
* Step 4:
  + - Example of the final product
    - It is built to undergo \_\_\_\_\_\_\_\_\_\_\_\_ before the product goes into full production.
  + - Looks like the final product
    - NOT \_\_\_\_\_\_\_\_\_\_\_\_
    - NOT \_\_\_\_\_\_\_\_\_\_\_\_\_
  + Record \_\_\_\_\_\_\_\_\_\_\_\_\_
* Step 5:
  + \_\_\_\_\_\_\_\_\_ the results!
  + What \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ need to be made?
  + Pursue an \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_?
  + Make \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?
  + Focus on making your solution \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Step 6: