

The Engineering Design Process Worksheet

Name: _____ **Period:** _____

Topic/Problem/Purpose:

TIPS:

After determining your problem to solve, discuss each Process Step in the chart on the next page so that you have a clear understanding of what you'll do before you begin the process of research and discovery, application, and analysis.

Put an emphasis on quantitative data where possible. Find multiple sources of information in order to devise more thorough solutions. Don't be afraid to choose the "wrong" solution as you may uncover new insights in the process.

Do not overthink this process—just use it as a structure for your problem solving/question answering work.

After completing, chart on back, please write a "pre-reflective" paragraph on your planned process:

Process Step	Notes	CITE Sources for Evidence
1. Define the problem		
2. Identify constraints on your solution (i.e., time, budget, materials, and criteria for success)		
3. Brainstorm multiple solutions for the problem		
4. Select the most promising solution (and know WHY)		
5. Prototype your solution		
6. Test and evaluate the prototype		
7. Iterate to improve your prototype		
8. Communicate your solution, either its success or failure		