



THE ENGINEERING DESIGN PROCESS RUBRIC

Engineering Design Process	4	3	2	1
Ask	The student exceeds expectations by extending the problem and/or the solution criteria.	The student fully restates the problem and adequately defines the criteria for a solution.	The student partially restates the problem and/or the solution criteria.	The student does not demonstrate knowledge of the problem or solution criteria.
Imagine	The student exceeds expectations by incorporating the best elements of multiple ideas.	The student considers strengths and weakness for more than one idea before beginning to plan.	The student considers strengths and weakness for only one idea before beginning to plan.	The student does not consider strengths or weaknesses of any possible solutions.
Plan	The student exceeds expectations by including specific details and measurements for his or her plan.	The student's plan includes details, a diagram, and list of needed materials.	The student's plan is missing details, a diagram, or a list of needed materials.	The student's plan is incomplete and/or does not attempt to address the problem and/or solution criteria.
Create	The student exceeds expectations by creating a polished prototype or model with creative or artistic flair.	The student uses his or her plan as a blueprint to create a prototype or model.	The student creates a prototype or model that is not based on his or her plan.	The student does not create a prototype or model that addresses the problem.
Improve	The student exceeds expectations by making and testing multiple iterations of the prototype or model.	After testing the prototype or model, the student used data to make improvements within the given time and material constraints.	After testing the prototype or model, the student declares there are no improvements that need to be made & does not attempt to improve the prototype or model.	The student does not test the prototype or model and therefore, does not make improvements.
Share	The student exceeds expectations by clearly articulating each element of the engineering design process as well as a self-reflection of the process.	The student clearly articulates each element of the engineering design process.	The student excludes one or more of the elements of the engineering design process.	The student does not present the engineering process.