

2020 SRC V-Portfolio Assessment Rubric

Team Name:

School:

Content: Please rate the team's overall understanding of the five-step Engineering Design Process.

Engineering Design Process Steps	Excellent 5	Satisfactory 3	Unsatisfactory 1	Rating
1. ASK: Identify The Problem	Constructs a detailed problem statement that accurately reflects the issue at hand.	Constructs a satisfactory problem statement that identifies the issue.	Constructs an unsatisfactory problem statement that does not reflect the issue at hand.	
2A: IMAGINE: Research The Problem Discuss research in a video or voice-over presentation that does not exceed 2 minutes.	Evidence of detailed research from <u>4 or more expert sources</u> that fully address the issues and the concept of STEM as it relates to robot design. <i>(Cite your sources.)</i>	Evidence of research from <u>3 expert sources</u> that address some of issues and the concept of STEM as it relates to robot design. <i>(Cite your sources.)</i>	Evidence of research from <u>less than 3 expert sources</u> that address some of the issues and the concept of STEM as it relates to robot design. <i>(Cite your sources.)</i>	
2B: IMAGINE (Part II): Brainstorm & Select Best Possible Solutions Discuss brainstorming and your solution in a video or voice-over presentation that does not exceed 2 minutes.	Evidence of students' brainstorming possible solutions and analysis of ideas including thumbnails sketches.	Evidence of students' brainstorming possible solutions and analysis of ideas including thumbnails sketches. <i>No</i> mention of how and/or why the prototype was chosen as the best possible solution.	No evidence of students' brainstorming possible solutions including product thumbnails sketches. <i>No</i> mention of how and/or why the prototype was chosen as the best possible solution.	
3. PLAN: Design Your Solution to the Problem Identified in Step 1 Discuss in a video or voice-over presentation that does not exceed 2 minutes.	Evidence of students' following a plan to construct the prototype against design requirements that include materials and techniques.	Evidence of students' following a plan to construct the prototype against design requirements that does not include materials, techniques.	No evidence students' followed a plan to construct the prototype.	
4. CREATE: Develop Your Solution to the Problem Discuss in a video or voice-over presentation that does not exceed 2 minutes.	Detailed evidence of how your team created its prototype, highlighting lessons learned and describing the procedure used to test robots (using tables, graphs, and other charts.)	Satisfactory evidence of how your team created its prototype, highlighting lessons learned and describing the procedure used to test robots is recorded and described (using tables, graphs, and/or charts).	Limited evidence of how your team created its prototype, highlighting lessons learned and describing the procedure used to test robots.	
5. IMPROVE: Evaluate Your Solution Discuss in a video or voice-over presentation that does not exceed 2 minutes.	Detailed evaluation of how you can modify your design to make it better.	Satisfactory evaluation of how you can modify your design to make it better.	Limited explanation of review and redesign highlighting how you can modify your design to make it better.	

Mechanics: Please rate the team on the inclusion of the following elements				
Element	Excellent 5	Satisfactory 3	Unsatisfactory 1	Rating
Video Length	Video presentation does not exceed 12 minutes.	N/A	Video presentation exceeds 12 minutes.	
Quality of Presentation	Video presentation effectively describes the engineering design process.	Video presentation partially describes the engineering design process.	Video presentation does not describe the engineering design process.	
Photographs and slides	<i>Photographs and slides have been included and are effectively used to enhance portfolio.</i>	Some photographs and slides were included in the presentation.	No photographs and slides were included in the presentation.	
Technical Drawings/Illustrations	Drawings of the robots <i>are</i> included.	N/A	Drawings of the robots <i>are not</i> included.	
Total Score:				
Comments/Feedback:				
Reviewer Initials:		TCE Staff Initials:		