



Rubric for Maker Project
AY 2025-26

Criterion	3	2	1	0
Introduction: - Problem statement - Rationale - Existing Solutions - Proposed Solution	There is a clearly defined problem statement related to SDG 11 AND Students provide a strong rationale for selecting this problem including: a personal connection, two well-integrated research references, correct APA citations, and a clear alignment with targets described under SDG 11. AND Students identify 2-3 solutions that already exist in the market, list the pros and cons of each and explain why their proposed solution is better. AND The introduction convinces the reader that the students have done thorough research on this problem and existing solutions	There is a clearly defined problem statement related to SDG 11 (This condition needs to be true to get a score of 2) If the above condition is true but then, any one of the following conditions is also true, the student gets a score of 2 The rationale includes a personal connection for why students want to solve this problem but there is only one well-integrated research reference, or the students do not clearly explain how this problem is aligned to specific targets under SDG 11. OR Students identify and analyse only one solution that already exists in the market or do not make a strong case for why their solution is better.	The introduction section is vague or seems largely incomplete or confusing. This could be because any of the following components are missing, vague, or not appropriately researched- the problem statement, alignment to SDG 11 and its targets, market analysis or secondary research. The section does not convince the reader that the problem is authentic or important, or that the solution students are offering is better than what exists in the market.	The introduction is missing OR Even after reading the entire introduction, it is not clear what is the problem that students are trying to solve.
Process - Resources - Design Iterations - Budget - Photos	Students list all materials, objects, tools and other resources used to build the prototype, as well as provide a rationale for selecting these materials versus other similar materials AND	Students list the materials, objects, tools and other resources used to build the prototype but don't provide a strong rationale for selecting these materials. AND/OR	The materials list seems bare minimum OR Only the final prototype sketch is included without showing any iterations in design	This section is missing OR The section has major components missing or has such few details that it doesn't tell



	The report includes detailed labelled sketches of every design iteration with an explanation for why designs were revised. The sketches are accurate visuals of their designs with labels describing essential components. AND The report presents a realistic budget required to build the prototype. AND This section includes photographs showcasing different phases of building the prototype (brainstorming, collecting resources, building, testing, collecting data etc.)	Detailed labelled sketches of each iteration are provided, but without an explanation for design revisions. AND/OR The report presents a budget to build the prototype but it lacks details. AND/OR Photographs are provided to showcase one or two phases of the process. In general, if all the components are present but lack some details, explanations or descriptions, students could be given a 2	OR The report presents a budget which is unrealistic or incomplete OR No photos are included In general, if a few components are missing or most components seem largely incomplete leaving you with many questions, students could be given a 1	you anything of value about the process of making the final prototype.
STEM Connections	Students clearly explain how their prototype works. They are able to draw connections between the mechanism /working of the prototype to STEM concepts. They also identify and describe the drawbacks of their design from a STEM perspective.	Students clearly explain how their prototype works. They are able to draw connections between the mechanism /working of the prototype to STEM concepts. However, students do not describe the drawbacks from a STEM perspective.	The mechanism of the prototype is explained, but no connection to STEM concepts is made.	No explanation of the prototype's working mechanism is provided. No connection to STEM concepts is made.
Testing Plan	The report includes a detailed data collection plan to test the prototype using methods that are logical and aligned to the problem that the students want to solve.	The report includes a data collection plan to test the prototype using methods that are logical and aligned to the problem that the students want to solve. BUT Quantity or quality of data could have been stronger to provide more convincing	A basic or incomplete testing plan is included. OR Data analysis is weak, making it unclear whether the prototype	The report doesn't include any testing plan. OR No data collection or analysis is provided to back students'



	AND The data collected are sufficient to draw a valid conclusion. AND Data analysis shows unambiguous and convincing evidence that the final prototype solves the selected problem.	evidence that the prototype works and successfully solves the problem	effectively solves the problem.	conclusion about the success of the prototype.
Demonstration of the prototype	The report includes a YouTube video link of less than 90 seconds that shows a clear demonstration of the prototype with an explanation of how it works or what it does. AND The demo convinces the viewer that the prototype was fully functioning when tested by the students	A YouTube video link is included but the demonstration of the prototype or explanation of its working could have been better shot/narrated/explained.	A YouTube video link is included, but the demonstration / explanation is minimal or unclear. The video does not fully convince the viewer that the prototype works.	No YouTube video link is provided.
Students' reflections	The reflections include detailed and authentic insights on what every student learned from the project and possible improvements or next steps.	The reflections include some insights on learnings and improvements, but lack depth or clarity.	The reflections are minimal and do not provide clear insights on learning or next steps. OR <50% of the students from the whole group have shared reflections	No reflections are included.