

Choose another Real World Skill that needs to be developed from the PPT.

Name:	Date:	Name of Problem:
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STEP 1: Identify the problem 3 Points - USE COMPLETE SENTENCES

- What is the goal and objective? (what do you have to do for this project?)
- Site specific examples from the design brief - Describe in your own words

Answer:

STEP 2: Identify Criteria & Constraints 5 Points - USE COMPLETE SENTENCES

- Identify Criteria and Constraints CLEARLY (what you NEED to do and what restrictions are there)
- What should it not do? - What exactly should the device do?

Answer:

STEP 3: Brainstorm Alternatives 4 Points

- All ideas are ok – List everything!!! - This begins the creative part
- Any format is ok. (words or sketches) - Use separate sheet of sketch paper
- Come up with AT LEAST 4 IDEAS

Answer: Insert sketches via Google Drawings or submit paper sketches (All on the same side of the sketch paper)

STEP 4: Generate Ideas 5 Points - USE COMPLETE SENTENCES

- Narrow down the possibilities to 2 ideas - Explain in detail below
- Predict the outcome of each idea (how will each idea turn out) (Do NOT list pro's and con's)

Answer:

STEP 5: Explore your possibilities 4 Points - USE COMPLETE SENTENCES

- List 2 pro's and 2 con's for the 2 ideas you chose in step 4
- Focus your pro's and con's through the criteria and constraints from step 2

Design 1	Design 2
1.	1.

2.

2.

STEP 6: Select an approach - Decide on Final Design 5 Points

- Choose **ONE** design idea - List all the details about that idea, describe it in detail
- Justify your choice, tell me **WHY** you chose it - **USE COMPLETE SENTENCES**
- Create a detailed sketch (**Insert sketch via Google Drawings or submit paper sketch**)

Answer:

IMPORTANT: Once you complete step 6 you may start getting together with other teammates who are completed and begin brainstorming and putting your ideas together.

STEP 7: Build a model or prototype 3 Points -
USE COMPLETE SENTENCES

- What problems did you have during planning or building?
- What revision was necessary during construction (what changes did you make)

Answer:

STEP 8: Refine or Redesign 6 Points - USE COMPLETE SENTENCES

- Did your design work? - If it works, how are you going to improve it?
- If it doesn't work, how are you going to redesign it so it does?
- What went wrong during building and testing? - How can we fix the problem?

Answer: