

STEP 1. Identify Challenges

Thoroughly read and discuss the future scene, consider the many challenges, issues, concerns, and problems related to it. Generate as many challenges as you can. Focus on 16 challenges you think are the most important. Write your 16 challenges in the booklet space provided. Word your challenges clearly; state the challenges as possibilities; use sentence statements, not questions. **Do not write on the back of any page. If needed, additional blank pages are provided.**

1.	
2.	
3.	
4.	

STEP 1. Identify Challenges (continued)

Do not write on the back of any page. If needed, additional blank pages are provided.

5.	
6.	
7.	
8.	

STEP 1. Identify Challenges (continued)

Do not write on the back of any page. If needed, additional blank pages are provided.

9.	
10.	
11.	
12.	

STEP 1. Identify Challenges (continued)

Do not write on the back of any page. If needed, additional blank pages are provided.

13.

14.

15.

16.

STEP 2. Select an Underlying Problem

Based on the challenges you listed in Step 1, identify a challenge of major importance. Write your underlying problem in question form. Include a condition phrase and the words, "In what ways might we...?" or "How might we...?" Your problem should clearly explain what you want to do and the reason it should be done. **Do not write on the back of any page. If needed, additional blank pages are provided.**

To show a connection between Step 1 and Step 2, in the space below, identify by number the Step 1 challenge(s) from which your underlying problem was developed.

Challenge(s) # _____

STEP 3. Produce Solution Ideas

Generate as many solution ideas as you can to your underlying problem. Choose your 16 most promising solution ideas and write them in the space provided. Write each solution idea in a sentence statement that describes *who* will carry out *what* action, *how* it will be done, *why* it will solve the problem and *where* and *when* the solution will take place. **Do not write on the back of any page. If needed, additional blank pages are provided.**

1.	
2.	
3.	
4.	

STEP 3. Produce Solution Ideas (continued)

Do not write on the back of any page. If needed, additional blank pages are provided.

5.	
6.	
7.	
8.	

STEP 3. Produce Solution Ideas (continued)

Do not write on the back of any page. If needed, additional blank pages are provided.

9.	
10.	
11.	
12.	

STEP 3. Produce Solution Ideas (continued)

Do not write on the back of any page. If needed, additional blank pages are provided.

13.	
14.	
15.	
16.	

STEP 4. Select Criteria

Generate criteria to help you decide which solution idea does the best job of solving *your* underlying problem. Select the five criteria you think are the most important for measuring your solution ideas and write them in the space provided. Each criterion should have a different focus. **Do not write on the back of any page. If needed, additional blank pages are provided.**

1.	
2.	
3.	
4.	
5.	

STEP 5. Apply Criteria

From your list of solution ideas, select the 8 ideas you think have the most potential to solve your underlying problem. Use each criterion to compare/rank the solutions on a scale from 1 (poorest) to 8 (best). Enter the numbers in the appropriate columns. Add the ranks you have given to each solution and enter the sums in the *Total* column.

Step 3 Sol'n #	Solution Idea	Criteria					Total
		1	2	3	4	5	
#							
#							
#							
#							
#							
#							
#							
#							

Please write your underlying problem from Step 2:

Team ID # _____

A large, empty rectangular box with a thin black border, occupying most of the page. It is intended for students to write their answers or show their work for Step 6.