Engineering Project Planning Guide New Mexico Climate Champions

STAGE 1 – Identify the Problem and the Constraints

1. What problem are we trying to solve?

- 2. What constraints do we need to keep in mind?
- 3. Group members:

STAGE 2 – Brainstorm and Select the Best Solution

4. What are some projects we could do to help solve the problem?

5. After discussion and careful consideration of the project constraints, here is our best solution idea. This is what we will do for our project:

STAGE 3 – Plan the Prototype Project

6. Fill in the project planning table with the tasks needed to complete your project, the team member responsible, and the deadline. There is a sample at the bottom of this page.

Tasks	Who Will Be in Charge of this Task?	Deadline
1)		
2)		
3)		
4)		
5)		
6)		
7)		
8)		

*Use an additional piece of paper if there are more than eight steps in your project plan.

SAMPLE PLANNING TABLE FOR RAINWATER HARVESTING SYSTEM AT NATURE PARK

Tasks	Who Will Be in Charge of this Task?	Deadline
Research and determine the best rainwater harvesting system for Nature Park.	LG	June 30, 2020
Write a proposal that includes the design idea, costs, and proposed location for the rainwater harvesting system.	LG	July 20, 2020
Present proposal at next Board of Directors meeting.	SB	July 20, 2020
Secure funding for the project.	SB	July 31, 2020
Purchase all materials.	LG	October 15, 2020
Install rainwater harvesting system.	JV	November 1, 2020
Create an informational poster about the rainwater harvesting system.	LG	December 31, 2020

STAGE 4 – Execute the Project

Carry out your project plan. When completing your project, you will likely run into obstacles and setbacks. Be sure to return to your project plan (Stage 3) and alter it as issues arise, including adjusting deadlines.

Communicate as a team. Check-in often as a group so team members can report on their tasks and everybody can remain on the same page.

STAGE 5 – Evaluate Progress and Identify Ways to Improve Project

7. Which parts of your project are going well?

8. Which parts of your project are not going well? What can you do to change these parts before the end of the project?

9. At the end of your project, evaluate your engineering project.

A. Did your project help solve the problem you wrote in #1? Provide evidence for your answer.

B. What would you do differently if you were starting this project again?