1. Identify the problem

2. List the problem constraints
3. **Brainstorm/create possible solutions as a group.** List ALL ideas in the group and include sketches. Attach additional paper if necessary.

4. **Plan a solution.** Based on the brainstormed ideas, choose one solution as a group. Describe the chosen solution and list as many details as possible.
5. **Collaboration.** Write down any ideas you gained from conversing with the other groups.

6. **Update your brainstormed solution.** Describe what changes you made.

7. **Create your planned solution.** Keep track of what is working, what is not working, and any design changes that needed to be made.
8. **Evaluate your prototype.** What worked? What didn’t work?

9. **Improve the design as needed.** Discuss as a group what you would change if you had the time to redesign.