



<INSERT PROBLEM TITLE>

<INSERT STUDENT NAME 1>

<INSERT STUDENT NAME 2>

THE PROBLEM

What is the problem?

- [Text]

Who has this problem?

- [Text]

Why should this problem
be solved?

- [Text]

How will I know this
problem has been solved?

- [Text]

BACKGROUND INFORMATION

- What is your research?
 - How did you discover this problem?
 - How did you get information to research this problem and attempt to solve it?
 - Interviews?
 - Personal experience?
 - Internet/Books?
 - Other ways?

WORKABLE SOLUTIONS

Solution #1

- What materials does this solution require?
- What would this solution look like (drawing, pictures, text)?
- What are some barriers you might come across with this solution?

Solution #2

- What materials does this solution require?
- What would this solution look like (drawing, pictures, text)?
- What are some barriers you might come across with this solution?

Solution #3

- What materials does this solution require?
- What would this solution look like (drawing, pictures, text)?
- What are some barriers you might come across with this solution?

THE PROTOTYPE

- Choose the best workable solution and create a plan to build a prototype
- What materials will you use for your prototype?
- Will your prototype be actual size or a model? Why?

<Insert a picture or drawing of your prototype here>

TESTING THE PROTOTYPE

- What worked? What did not work? Why?
- What materials need to be changed and/or kept? Why?
- Did the size of your prototype give you enough information to move forward with a final product? Why or why not?
- Did you have other people test your design and give you feedback? Why or why not?

REDESIGNING THE PROTOTYPE

- Use the data from your testing to redesign with...
 - Different materials
 - Different builds
 - Different sizes
- Write about or show images of your prototype redesigning process and result

FINAL RESULT

- Once you have a final product, go back to your second slide and review the initial questions you answered
 - Does your final prototype solve your problem for the person or people for whom it needs to be solved?
 - If yes, **WAY TO GO!** But always think about if you can improve it even more!
 - If no, copy this PowerPoint and start the problem/solution cycle again
- Insert pictures of your final design
- Discuss why this design solves the problem
- Reflect on how you feel about the process from start to finish in this project