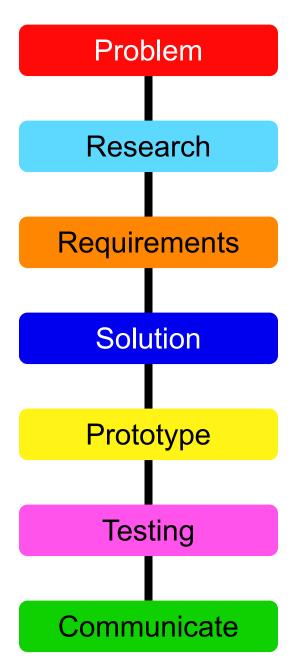
Engineering Design Process

The Engineering Design Process is the technique you will use to design your invention. It is the same process used by professional engineers and is very similar to the Scientific Method. By following these steps, you can take your invention all the way from an idea to a final product.



Identify & Define the Problem

Observe the problems around you and choose one to solve. Then define the important aspects of the problem.

Research the Problem

Research who/what is affected by the problem, existing solutions/inventions, and areas for improvement.

Specify Solution Requirements

List the specific requirements for your solution. The design is successful when it has met these requirements.

Identify Options & Choose the Best Solution

Brainstorm and discuss to identify original ideas. Compare with the requirements to choose the best solution.

Design & Build the Prototype

Determine how your invention will work and what it will look like. Then follow the design and build it.

Test the Prototype

Test to see if the prototype works as intended and meets the requirements. Repeat previous steps until it does.

Communicate Your Solution

Present and explain your problem, the research, the process you followed, and the invention you created.