NGSS Engineering Design Process K - 2

Define Identify

situations that people what to change as problems that can be solved through engineering.

Define

Specify criteria and constraints that a possible solution to a simple problem must meet.

Optimize

Compare solutions, test them, and evaluate each.



Develop solutions

Convey possible solutions through visual or physical representations.

Optimize

Improve a solution based on results of simple tests, including failure points



Research and explore multiple possible solutions.





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Engineering Design Process

Ask:

Define the problem Do background research Specify requirements

Imagine:

Brainstorm solutions

Plan:

Choose which seems the best solution
Develop the solution

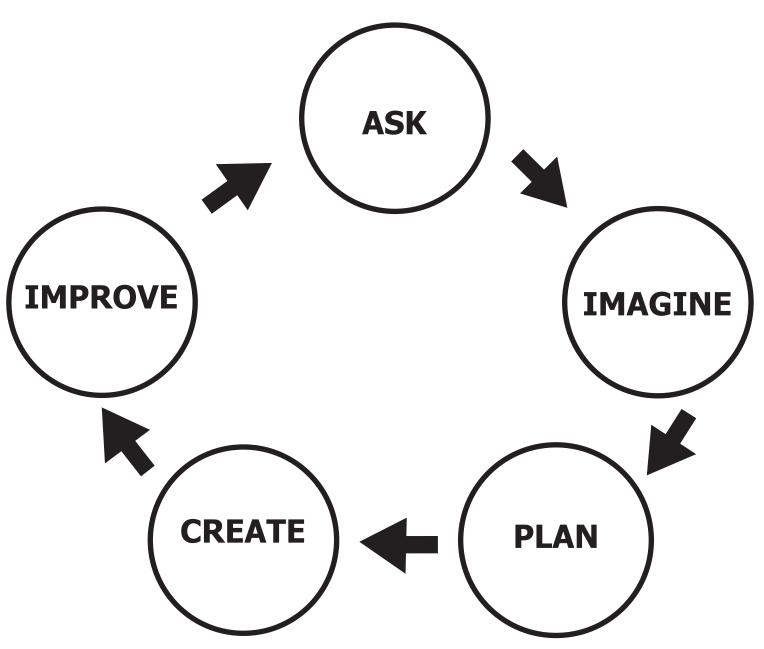
Create:

Build a prototype Test

Improve:

Evaluate results, then redesign





Adapted from: www.teachengineering.org