The Engineering Design Process

Identify the Problem

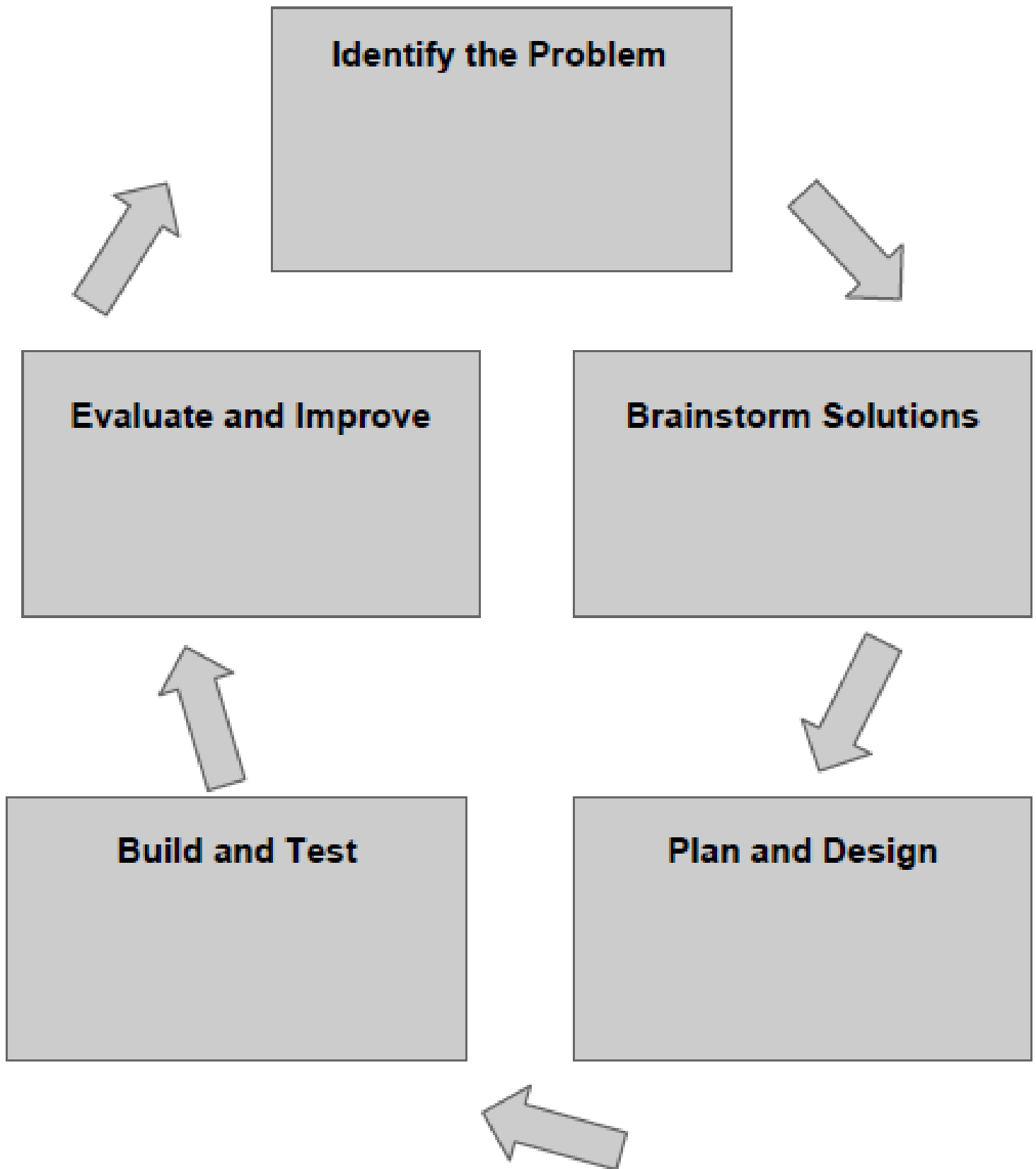**Evaluate and Improve**

Brainstorm Solutions

Build and Test

Plan and Design

The Engineering Design Process Template

Identify the Problem

- Define the problem
- Identify constraints and limitations with the challenge. (parts of the problem that make it difficult to solve)

Brainstorm Solutions

- Brainstorm solutions and possible designs
- Use the following questions to help guide your brainstorming and design solutions

Plan and Design

- Develop an outline, blueprint, and graphic organizer for your design using the grid below
- Identify steps needed to create your structure
- Assign jobs and team roles
- Communicate

Build and Test

- Put your design and plan into action and build your structure
- Test out your design by seeing if it floats

Evaluate and Improve

- Evaluate how your structure performed in the challenge
- How can you make your design better?
- Make those changes and test out the new design