Steps in the Design Process

1. Find the need.
2. Define the problem.
3. Brainstorm to come up with ideas.
4. Select the most promising design.
5. Plan and manage the project.
6. Build-test-refine the design.

Scientists investigate what is; they discover new knowledge by peering into the unknown...

Engineers create what has not been; they make things that have never existed before...

— Joseph Bordogna, Deputy Director, National Science Foundation

Imagination is more important than knowledge.

— Albert Einstein

Every act of creation is first an act of destruction.

— Pablo Picasso

Brainstorm Guidelines

No negative comments are allowed.
Encourage wild ideas.
All ideas are recorded.
Stay focused on topic.
One conversation at a time.
Build on the ideas of others.

Olympic Engineering Lesson > Shapes of Strength Activity—Design Process