

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

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

— Joseph Bordogna, Deputy Director, National Science Foundation

# Steps in the Design Process

1. Define the problem.
2. Come up with design ideas (brainstorm).
3. Select the most promising design.
4. Communicate about and plan your design.
5. Create and test your designed product.
6. Review for improvements.
7. Iterate your design (if necessary).

Every act of creation is first  
an act of destruction.

— Pablo Picasso

Imagination is more  
important than knowledge.

— Albert Einstein

# Brainstorming Guidelines

- No negative comments allowed.
- Encourage wild ideas.
- Record all ideas.
- Build on the ideas of others.
- Stay focused on the topic.
- Allow only one conversation at a time.