The Engineering Design Process

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, National Science Foundation

Steps in the Design Process

- 1. Define the need or problem.
- 2. Come up with ideas (brainstorming).
- 3. Select the most promising idea or design.
 - 4. Communicate and plan the project.
- 5. Create, build/create and test the design.
 - 6. Evaluate and revise the design.

Imagination is more important than knowledge.

— Albert Einstein

Every act of creation is first an act of destruction.

— Pablo Picasso

Brainstorming Guidelines

No negative comments allowed.

Encourage wild ideas.

All ideas are recorded.

Stay focused on topic.

One conversation at a time.

Build on the ideas of others.

Biodomes: Lesson 2 — Engineering Design Process Handout

Engineering is about...

bringing ideas to action. It's about creating a safer and healthier planet.

Apply your ingenuity and collaborate with other people to imagine and create things that have never existed before.

Life takes engineering!