### **CHAPTERS**

- 1 Overview
- 2 Design
- 3 Presentation
- 4 Dimensions
- 5 Uncertainty
- 6 Vectors / Matrices
- 7 Materials
- 8 Statics
- 9 Robotics
- 10 Digital Systems
- 11 Chemical Processes

#### **OTHER**

- A Laboratory Experiments
- B Projects

Oral

Design/Construction

Written

- C Questions/Problems
- D Readable References

## What is Engineering?











# LABORATORY EXPERIMENTS

- 1 Mousetrap Design
- 2 Mousetrap Construction
- 3 Bridge Design (Virtual)
- 4 Chemical Processes
- 5 Humidity Interpretation (Virtual)
- 6 Logic Circuits (Virtual)
- 7 Materials
- 8 Robot Arm Control (Virtual)
- 9 Count the Trees (Virtual)
- 10 Remote Measurement
- 11 College Rankings (Virtual)
- 12 Robot Assembly
- 13 Sample Lab Report

### What is Engineering?











### **PROJECTS**

- Written"Engineering and the Mind's Eye"
- WrittenMini Research Topic
- 3 Oral
  Respond to a Request for Proposal (RFP)
- 4 Design/Construction
  Build a Bridge
- Design/ConstructionBuild a Mini-Bridge

## What is Engineering?









