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Engineering Reading Participation Assignment:

## Read Chapter 12 - Manufacturing Materials

- Name and describe the five types of cast iron.
- Name five elements added to carbon steel. What properties of the steel is changed by the addition of each element?
- Name four shapes structural steel comes in.
- Name three nonferrous metals and name one advantage for each.
- Define the following terms:
  - o Plastics
  - o Thermoplastics
  - o Thermosetting Plastics
- Name seven advantages of plastics over metals.
- What is the difference between mechanical and cellular rubber?
- What is the difference between closed-cell rubber and open-cell rubber?
- Name five design factors that are advantageous for rubber.