

Section 8: The Mechanical Properties of Materials

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Read sections 6.1-6.10 pretty carefully.

Skim 6.11 – 6.12 on design and safety factors. These are important concepts.

Read 7.1-7.2 introducing dislocations (focus on edge dislocations)

Skim 7.3-7.7

Read 7.8 – 7.10 on strengthening mechanisms

Read 8.1-8.7 on brittle fracture and fatigue

Skim 8.8 – 8.11 appreciate the factors that contribute to and characteristics of fatigue failure

Skim 8.12-8.15 be able to define creep and recognize the conditions when it can be a problem