

LEARNING OBJECTIVES
CHAPTER 1 - INTRODUCTION

1. List six different property classifications of materials that determine their applicability.
2. Define what is meant by a structural element of a material, and then cite two structural elements.
3. (a) Cite the four components that are involved in the design, production, and utilization of materials.
(b) Now, briefly describe the interrelationships between these components.
4. Cite three criteria that are important in the materials selection process.
5. (a) List the three primary classifications of solid materials, and then cite the distinctive chemical feature of each.
(b) In addition, note the other three types of materials, and, for each, its distinctive feature(s).
6. (a) Briefly define “smart material/system.”
(b) Briefly explain the concept of “nanotechnology” as it applies to materials.