Assignment 1: Discussion—Materials Science: Designing Form to Fit Function

Materials science is an interdisciplinary field where science and technology are used to develop and apply our understanding of matter at the atomic level to improve existing or to make new materials. It is a fusion of the basic scientific fields of physics and chemistry where knowledge of atomic theory, molecular bonding, and the macroscopic properties of metals, ceramics, and plastics come together to solve manufacturing and engineering problems.

Use the Internet, Argosy University library resources, and your textbook to research materials science. Do the following:

* Discuss scientific and technical concepts related to materials science. Use the manufacturing of one of the following materials as the basis for your response:
  + Plastics
  + Glass
  + Metals
* Discuss how materials science has advanced to the stage where materials can be engineered to fit a specific purpose.
* Provide an example of an application or object that is made of materials specifically engineered for that purpose.

Support your statements with examples. Provide a minimum of three scholarly references.

Write your initial response in 2–3 paragraphs. Apply APA standards to citation of sources.