

What Is the Design Process?

Lesson 1 Quiz

- 1 Which of these is an example of technology?
- (A) developing a hypothesis
 - (B) formulating a new theory
 - (C) a sketch of an engine
 - (D) an artificial hip replacement
- 2 Which statement **best** describes the reason technology changes over time?
- (F) People enjoy having new technology.
 - (G) Old technology never meets the needs it was designed for.
 - (H) People's needs are better met when technology is very complex.
 - (I) People find better ways to meet their needs as their knowledge increases.
- 3 What is the first step an engineer should take in developing a new technology?
- (A) Identify the problem to be solved.
 - (B) Test the model of the new machine.
 - (C) Design the model for the new machine.
 - (D) Evaluate the performance of the machine.

- 4 An engineer designed four braces to offer comfort and support for people who have had knee surgery. The table below shows the results from a survey of 100 people who tried the engineer's four prototype braces.

Brace design	Percentage of people choosing this brace
Brace A	27%
Brace B	18%
Brace C	42%
Brace D	33%

What can the prosthetic designer assume from the information in the table?

- (F) Brace A is preferred by a majority of the people surveyed.
 - (G) Brace B would most likely keep people from becoming injured again.
 - (H) Brace C would be the best choice for comfort and support.
 - (I) Brace D is the brace that can most likely be improved by further design.
- 5 A man has a steel rod surgically inserted to replace a shattered bone. Which statement **best** describes the goal of this technology?
- (A) to develop steel tools
 - (B) to improve a person's health
 - (C) to learn how the body works
 - (D) to improve how people can walk