



*As you prepare for the chapter one quiz, please consider the following questions to guide your reading. Remember that the PowerPoint for this chapter can be found in the “Biotechnology Textbook PowerPoints” folder, or if you are viewing this document electronically [click here](#) for the online version. You will need to use the PowerPoint as a resource to review what you have read, but not as the sole source of information.*

1. What is biotechnology? Distinguish between pure and applied sciences.
2. Review the timeline on pages 4-5. How and when did society first use some form of biotechnology?
3. List at least four “tools” that are used in biotechnology.
4. What is the definition for “systems biology”? What are the four major “-omics”?
5. What is bioinformatics? List at least four uses of bioinformatics.
6. Describe at least four ways in which biotechnology can be used in healthcare.
7. Describe how Rexin-G can be used to target pancreatic cancer?
8. What is pharmacogenomics? Give an example of a drug that has been used for this type of medicine.
9. What are genetically modified organisms? Give three examples of this in agriculture.
10. What is pharming and give one example.
11. How can biotechnology be used in industrial manufacturing? Give two examples.
12. How can biotechnology be used in pollution monitoring and waste management? List two examples.
13. How can biotechnology be used in conservation? Give two examples.
14. What are two ways in which scientific information can be shared?
15. What three governmental agencies monitor and regulate biotechnology?
16. Compare and contrast the effects of education on earning table on page 19.
17. List three careers in biotechnology.