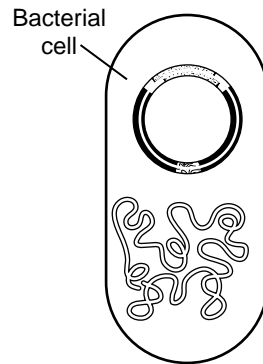


Chapter 13 Genetic Engineering

Chapter Vocabulary Review

Completion *On the lines provided, complete the following sentences.*

1. In _____, only animals with desired characteristics are allowed to produce the next generation.
2. Crossing dissimilar individuals to bring together the best of both organisms is called _____.
3. The continued breeding of individuals with similar characteristics is called _____.
4. Biologists change the DNA code of a living organism through _____.
5. A(An) _____ cuts DNA at a specific sequence of nucleotides.
6. DNA fragments can be separated and analyzed by _____.
7. DNA molecules that are produced by combining DNA from different sources are called _____.
8. A technique known as _____ is used to make many copies of a single gene.
9. Inside the bacterium below is a small circular piece of DNA called a(an) _____.



10. A gene for antibiotic resistance may be used as a(an) _____, making it possible to identify a transformed cell.
11. A(An) _____ organism contains genes from another species.
12. A(An) _____ is a member of a population of genetically identical cells produced from a single cell.

Multiple Choice *On the lines provided, write the letter of the answer that best completes the sentence or answers the question.*

- _____ 13. Combining the disease-resistance ability of one plant with the food-producing capacity of another is an example of
- a. genetic engineering.
 - b. inbreeding.
 - c. hybridization.
 - d. gel electrophoresis.
- _____ 14. The technique that helps to ensure that the characteristics that make each breed unique will be preserved is called
- a. genetic engineering.
 - b. inbreeding.
 - c. hybridization.
 - d. gel electrophoresis.
- _____ 15. What will cut a DNA sequence only if it matches the sequence precisely?
- a. plasmid
 - b. genetic marker
 - c. polymerase chain reaction
 - d. restriction enzyme
- _____ 16. A method used to compare the genomes of different organisms or different individuals is called
- a. hybridization.
 - b. selective breeding.
 - c. cloning.
 - d. gel electrophoresis.
- _____ 17. A plasmid that contains a gene for human growth hormone is an example of
- a. recombinant DNA.
 - b. a genetic marker.
 - c. a polymerase chain.
 - d. hybridization.
- _____ 18. During bacterial transformation, the foreign DNA is first joined to a small circular molecule known as a
- a. plasmid.
 - b. genetic marker.
 - c. clone.
 - d. restriction enzyme.
- _____ 19. A tobacco plant that glows in the dark is an example of
- a. a clone.
 - b. a transgenic organism.
 - c. hybridization.
 - d. inbreeding.
- _____ 20. Ian Wilmut created a sheep named Dolly using a process called
- a. hybridization.
 - b. selective breeding.
 - c. cloning.
 - d. inbreeding.