

1. Cells: The Fundamental Units of Life
2. Chemical Components of Cells
3. Energy, Catalysis, and Biosynthesis
4. Protein Structure and Function
5. DNA and Chromosomes
6. DNA Replication and Repair
7. From DNA to Protein: How Cells Read the Genome
8. Control of Gene Expression
9. How Genes and Genomes Evolve
10. Analyzing the Structure and Function of Genes
11. Membrane Structure
12. Transport Across Cell Membranes
13. How Cells Obtain Energy from Food
14. Energy Generation in Mitochondria and Chloroplasts
15. Intracellular Compartments and Protein Transport
16. Cell Signaling
17. Cytoskeleton
18. The Cell Cycle
19. Sexual Reproduction and Genetics
20. Cell Communities: Tissues, Stem Cells, and Cancer