

1. Explore the process of protein synthesis in cells. Discuss the role of DNA, RNA, and ribosomes in the synthesis of proteins.
2. Examine the concept of homeostasis in living organisms. Provide examples of physiological processes that contribute to maintaining internal balance.
3. Compare and contrast plant and animal cells. Highlight the unique features of each cell type and their contributions to the respective organisms.
4. Investigate the impact of genetic mutations on the phenotype of organisms. Discuss the types of mutations and their consequences.
5. Discuss the principles of ecology and the levels of ecological organization. How do ecosystems function, and what are the factors influencing population dynamics?