

Chapter 8 “From DNA to Protein” Study Guide

1. What is a nucleotide?
2. What are the nitrogenous bases and how do they pair up.
3. Draw a DNA molecule and label the sugar, phosphate and nitrogen base molecules.
4. What is the name of the DNA structure?
5. Explain the structure of the DNA molecule.
6. What is DNA replication and where does it take place?
7. What enzyme is involved in DNA replication?
8. Explain what the central dogma is.
9. What are the three differences between a DNA molecule and an RNA molecule?
10. Explain what transcription is and what it produces?
11. What are the three types of RNA molecules and the function of each?
12. Explain what translation is and what it produces?
13. What is a codon?
14. What is the anticodon?
15. How many letters correspond for an amino acid?
16. Why is engineering possible?
17. Define a clone.
18. What does the “blueprint of life” refer to?
19. Where are proteins made?
20. What is a genome?
21. What are the steps of DNA replication?
22. What is the function of transcription?
23. What is the function of translation?
24. What are the 4 types of mutations?