Name Period Date

SECTION 8.4

TRANSCRIPTION

Study Guide

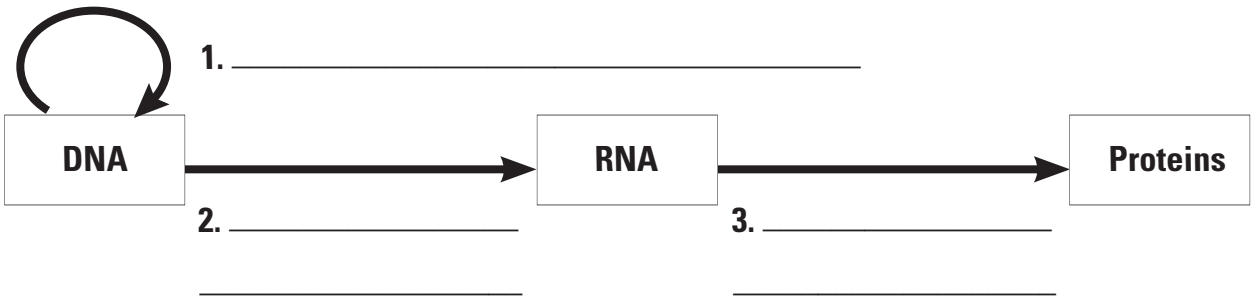
KEY CONCEPT

Transcription converts a gene into a single-stranded RNA molecule.

VOCABULARY	
central dogma	messenger RNA (mRNA)
RNA	ribosomal RNA (rRNA)
transcription	transfer RNA (tRNA)
RNA polymerase	

MAIN IDEA: RNA carries DNA's instructions.

Label each of the processes represented by the arrows in the diagram below. Write where each of these processes takes place in a eukaryotic cell in parentheses.



Fill in the table below to contrast DNA and RNA.

DNA	RNA
4. Contains the sugar deoxyribose	
5.	Has the bases A, C, G, and U
6. Typically double-stranded	

MAIN IDEA: Transcription makes three types of RNA.

7. What enzyme helps a cell to make a strand of RNA?

_____

Section 8.4 STUDY GUIDE CONTINUED

8. Summarize the three key steps of transcription.

9. Write the basic function of each type of RNA in the chart below.

Type of RNA	Function
mRNA	
rRNA	
tRNA	

MAIN IDEA: The transcription process is similar to replication.

10. List two ways that the processes of transcription and replication are similar.

11. List two ways that the end results of transcription and replication differ.

Vocabulary Check

12. How does the name of each type of RNA tell what it does?

13. What is transcription?