

SECTION

8.5

TRANSLATION

Reading Guide

KEY CONCEPT

Translation converts an mRNA message into a polypeptide, or protein.

VOCABULARY		
translation	stop codon	anticodon
codon	start codon	

MAIN IDEA: Amino acids are coded by mRNA base sequences.

1. What is translation?
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2. What is a codon?
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3. Would the codons in Figure 8.13 be found in a strand of DNA or RNA?
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4. What is a reading frame?
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Refer to Figure 8.13 to complete the table below.

Codon	Amino Acid or Function
5. AGA	
6. UAG	
7.	tryptophan (Trp)
8. GGA	

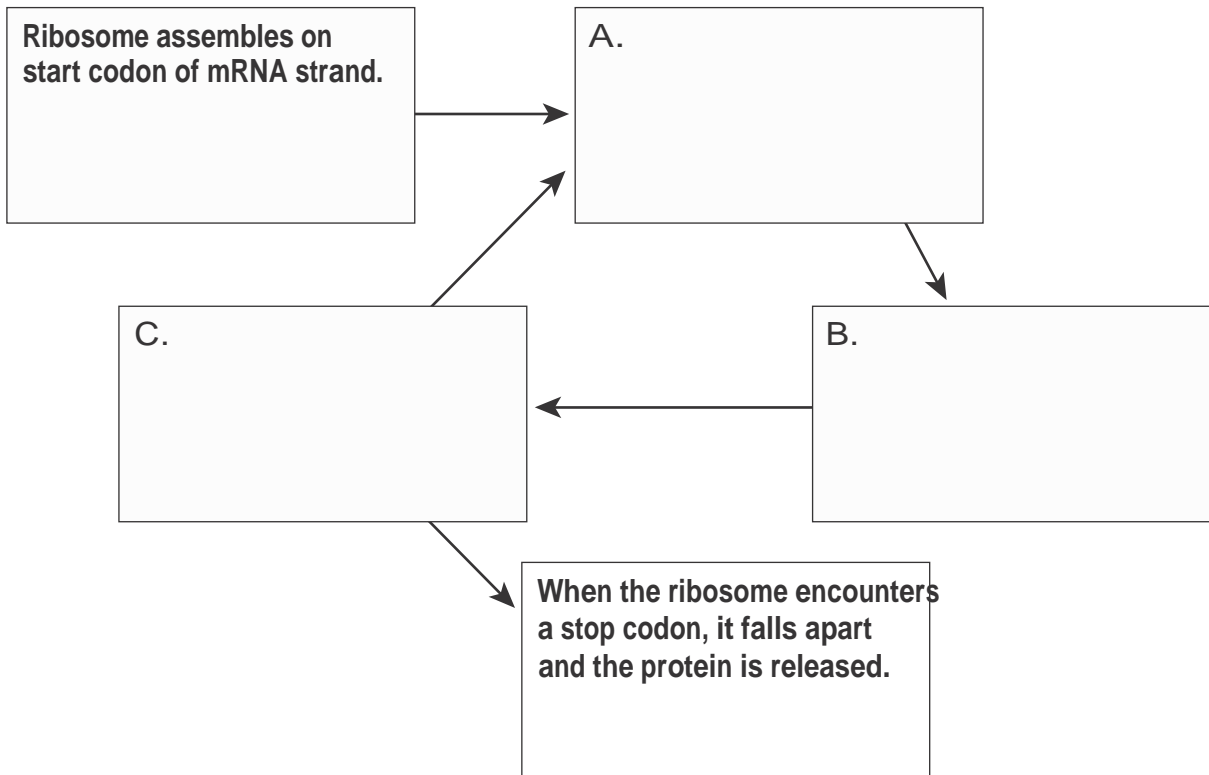
MAIN IDEA: Amino acids are linked to become a protein.

9. \_\_\_\_\_ and \_\_\_\_\_ are the tools that help a cell translate an mRNA message into a polypeptide.
10. The \_\_\_\_\_ subunit of a ribosome holds onto the mRNA strand.
11. The \_\_\_\_\_ subunit of a ribosome has binding sites for tRNA.

## READING GUIDE, CONTINUED

12. A tRNA molecule is attached to an \_\_\_\_\_ at one end and has an \_\_\_\_\_ at the other end.

Fill in the cycle diagram below to outline the steps of translation.



## Vocabulary Check

13. What are AGG, GCA, and GUU examples of?

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14. What is a set of three nucleotides on a tRNA molecule that is complementary to an mRNA codon?

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15. What do codons code for in addition to amino acids?

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