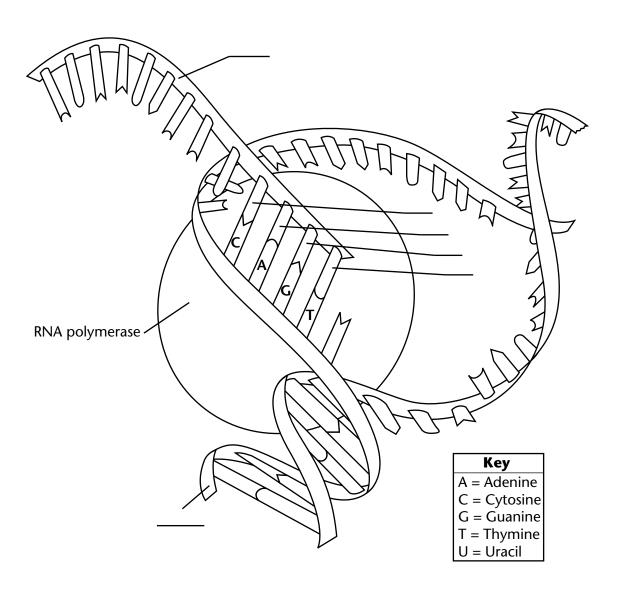
Name	Class	Date
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Transcription

In transcription, RNA polymerase splits the two halves of a strand of DNA. RNA then uses one half as a template to make a copy of the other half. RNA contains the nucleotide uracil instead of the nucleotide thymine.

Label the DNA and RNA. Then, label the missing nucleotides marked on the diagram.



Use the diagram to answer the question. Circle the correct answer.

1. In RNA, which nucleotide is always paired with uracil?

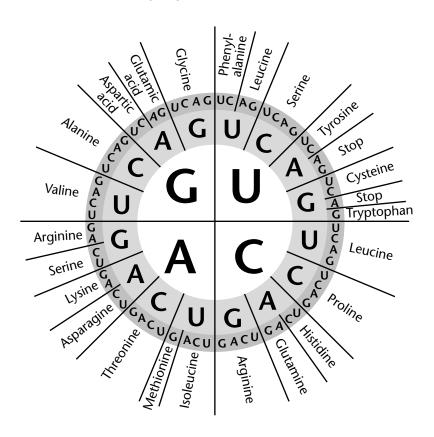
adenine guanine

During replication, templates to make of DNA transcription is used as a templat	the process by which a cell both strands of the double complementary, or matching the process by which a steet of generate a strand of not formation. One row has been	e helix are used as ng, strands of DN single strand of D nRNA.
Template DNA	Complementary DNA	Messenger RNA (mRNA)
TTACG	AATGC	AAUGC
	GGCGG	
		ACGUAGC
AGACTC		
	GATAAGA	
		CUGGCUAC
	ample of a template DNA ong. Then give its matchir	

Decoding mRNA

The diagram shows the mRNA codes that correspond to amino acids and stop codons. Read the diagram from the center outwards. For example, the mRNA code UAC corresponds to the amino acid tyrosine.

Write the name of the amino acid that corresponds to each mRNA code. The first one has been done for you.



mRNA Code	Amino Acid
AAA	lysine
GCG	
GAU	
CAA	

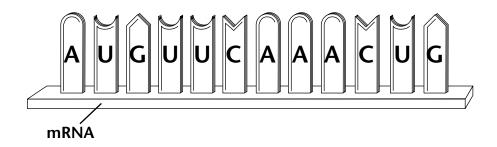
Use the diagram to answer the questions.

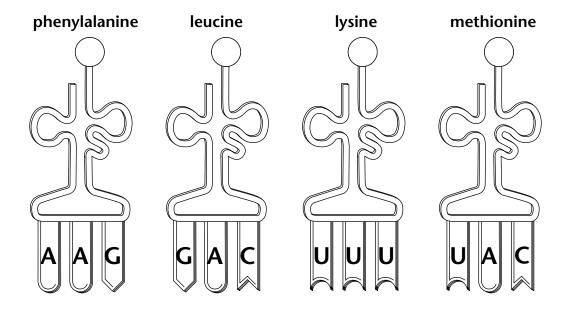
- 1. Which two mRNA codes correspond to histidine?
- 2. How many different mRNA codes correspond to arginine?

Translation

During translation, transfer RNA (tRNA) anticodons match to messenger RNA (mRNA) codons. Each tRNA molecule can carry one particular amino acid. The amino acids are joined to form a polypeptide.

Number the four tRNA anticodons in the order in which they should appear to match the codons in the mRNA strand.





Use the diagrams to answer the question.

1. List the amino acids in the order they would appear in the polypeptide coded for by the mRNA.