

Three-letter codons of messenger RNA and the amino acids specified by the codons

AAU } Asparagine CAU } Histidine GAU } Aspartic acid UAU } Tyrosine
 AAC } CAC } GAC } UAC }

AAA } Lysine CAA } Glutamine GAA } Glutamate UAA } Stop
 AAG } CAG } GAG }

ACU } Threonine CCU } Proline GCU } Alanine UCU } Serine
 ACC } CCC } GCC } UCC }
 ACA } CCA } GCA } UCA }
 ACG } CCG }

AGU } Serine CGU } Arginine GGU } Cysteine
 AGC } CGC } GGC } UGC }
 AGA } Arginine CGA } GGA } Glycine UGA } Stop
 AGG } CGG } GGG }

AUU } Isoleucine CUU } Leucine GUU } Phenylalanine
 AUC } CUC } GUC } UUC }
 AUA } CUA } GUA } Valine
 AUG } Methionine CUG }

Work with DNA! - Fill in the Blanks, Using Your Knowledge of Translation and the Genetic Code

1.

DNA																												
A	U	G	A	A	G	U	U	G	G	C	G	C	A	U	U	G	A	C	C	A	C	A	U	A	C	U	A	A
5' mRNA																												
a.a.																												

2.

DNA																												
A	U	G	C	A	U	C	A	G	A	A	U	A	A	A	G	A	U	G	A	A	C	G	G	A	G	U	A	G
5' mRNA																												
a.a.																												

3.

DNA																											
A	A	U	A	U	G	U	U	C	U	G	U	U	G	A	U	U	G	A	U	G	A	A	U	A	A	C	G
5' mRNA																											
a.a.																											

4.

DNA																												
5' mRNA																												
a.a.																												
*Met	Val	Ala	Asp	Glu	Gly	Arg	Lys	Trp	STOP																			

5.

DNA																													
T	A	C	G	G	T	T	C	A	T	C	C	A	T	T	G	G	T	A	A	A	T	A	C	C	A	G	A	C	T
5' mRNA																													
a.a.																													

6.

tRNA																									
5' mRNA																									
a.a.																									
A	U	G	U	C	A	U	A	C	A	G	U	U	U	C	C	C	U	A	A	G	G	G	U	G	A