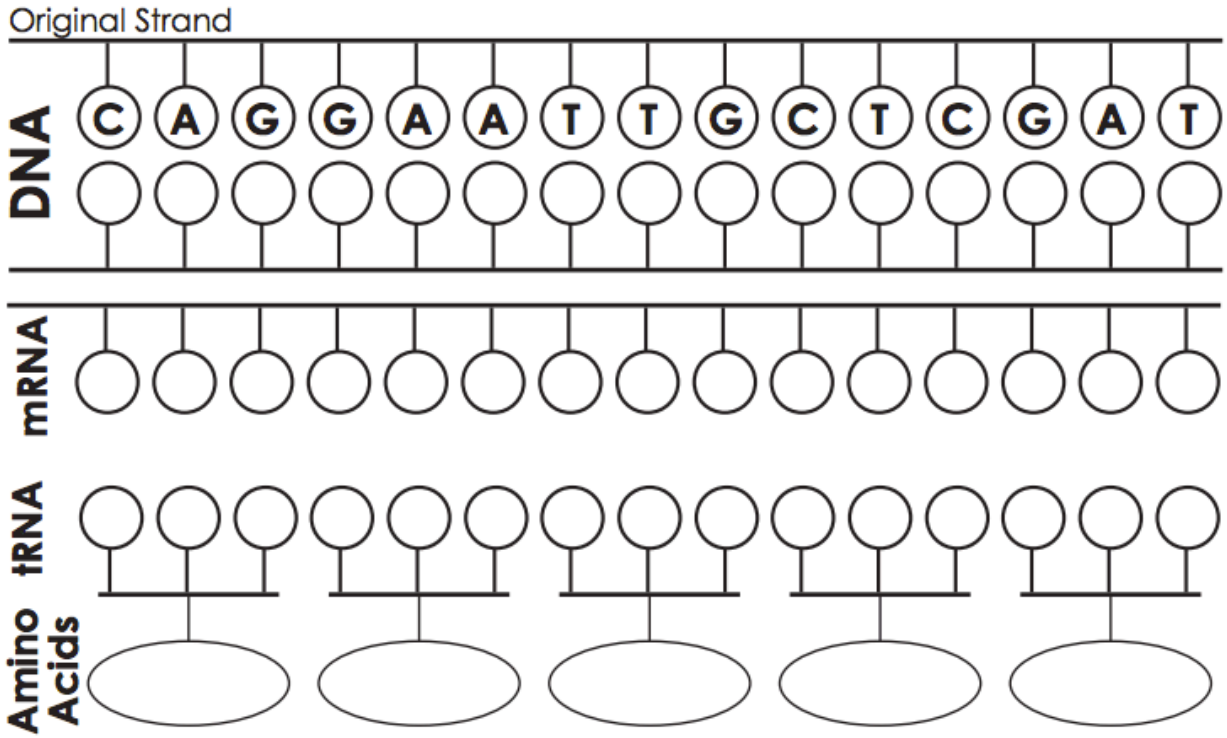
Name _____ Date _____

Fill in he blanks in the diagram below. Use the mRNA Codons to identify the amino acids.

The genetic code matches each mRNA codon with its amino acid or function.

Suppose you want to determine which amino acid is encoded by the CAU codon.

1. Find the first base, C, in the left column.
2. Find the second base, A, in the top row. Find the box where these two intersect.
3. Find the third base, U, in the right column. CAU codes for histidine, abbreviated as His.

First base	Second base: U	Second base: C	Second base: A	Second base: G	Third base
U	UUU phenylalanine(Phe)	UCU serine (Ser)	UAU tyrosine (Tyr)	UGU cysteine (Cys)	U
	UUC	UCC	UAC	UGC	C
	UUA leucine (Leu)	UCA	UAA STOP	UGA STOP	A
	UUG	UCG	UAG STOP	UGG tryptophan (Trp)	G
C	CUU leucine (Leu)	CCU proline (Pro)	CAU histidine(His)	CGU arginine (Arg)	U
	CUC	CCC	CAC	CGC	C
	CUA	CCA	CAA glutamine (Gln)	CGA	A
	CUG	CCG	CAG	CGG	G
A	AUU isoleucine (Ile)	ACU threonine (Thr)	AAU asparagine (Asn)	AGU serine (Ser)	U
	AUC	ACC	AAC	AGC	C
	AUA	ACA	AAA lysine (Lys)	AGA arginine (Arg)	A
	AUG methionine (Met)	ACG	AAG	AGG	G
G	GUU valine (Val)	GCU alanine (Ala)	GAU aspartic acid (Asp)	GGU glycine (Gly)	U
	GUC	GCC	GAC	GGC	C
	GUA	GCA	GAA glutamic acid (Glu)	GGA	A
	GUG	GCG	GAG	GGG	G