

DNA Scavenger Hunt

DNA carries the genetic code to the ribosome's via messenger RNA or mRNA. RNA is a single strand that contains the bases adenine, guanine, cytosine and uracil (DNA contains thymine instead of uracil). The process of taking DNA and making RNA is called transcription and occurs in the nucleus. Translation is the next step and occurs in the cytoplasm of the cell within the ribosomes. The mRNA that is made during transcription travels out of the nucleus to the ribosome where it is translated into an amino acid sequence using the genetic code.

In this activity you will be transcribing DNA into mRNA and then translating the message using the secret code. The clues will take you on a scavenger hunt throughout the classroom.

Directions: You have been given the DNA code. Your first step is to transcribe the DNA into RNA. Then find the codon on the Secret Code to translate what the secret message is. You must go in the order of the clues and attach all of your clues to the answer sheet. **Good Luck!!!!**

The Secret Code (mRNA codons)			
UUU = A	CAA = H	AAA = O	UAG = V
UAC = B	GAC = I	UCA = P	CAG = W
AGG = C	CCC = J	GAG = Q	UGG = X
GCU = D	AAU = K	UCC = R	UCG = Y
AAG = E	CGC = L	GCG = S	ACC = Z
CUC = F	AUC = M	GGU = T	
GAU = G	GCA = N	CUG = U	

Example

DNA: CTA TTT TTT CGA GCG GAC TCC TTA

mRNA: GAU AAA AAA GCU CGC CUG AGG AAU

Clue: G O O D L U C K = Good Luck