

## From DNA to Protein

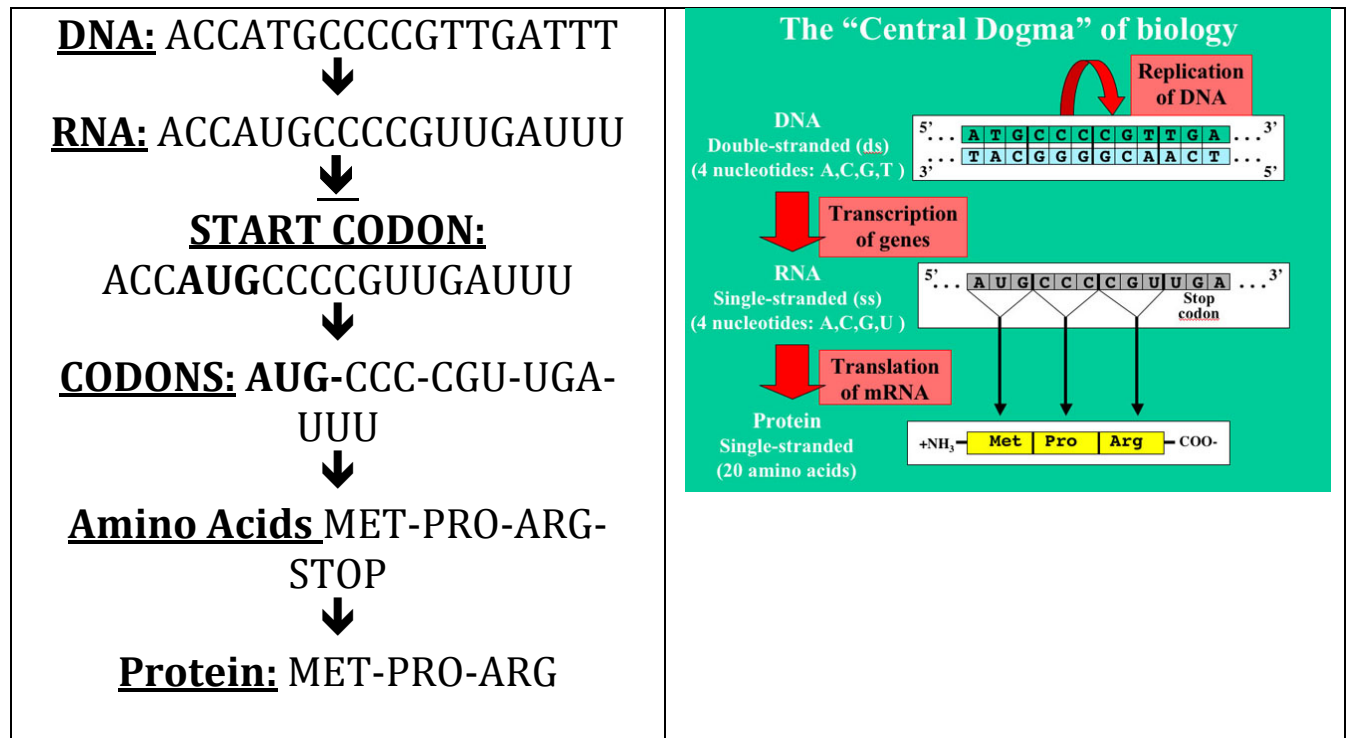
The Process:

**DNA → RNA → AUG → Codons → Amino Acids to stop → Protein**

or

1. Take **DNA** sequence
2. Turn to **RNA** (change all T's to U's)
3. Find **AUG**
4. Split the rest of the sequence into **codons** from there
5. Turn codons into **amino acids** until you hit STOP
6. The **protein** is the string of amino acids from MET to the amino acid before STOP

### Practice Test Answers:



## Practice Strands

1)

**DNA:** AATGTCAGAGGTGAAATGCTATTGAGGT



**RNA:** AAUGUCAGAGGUGAAAUGCUAUUGAGGU



**Start Codon:**

AAUGUCAGAGGUGAAAUGCUAUUGAGGU



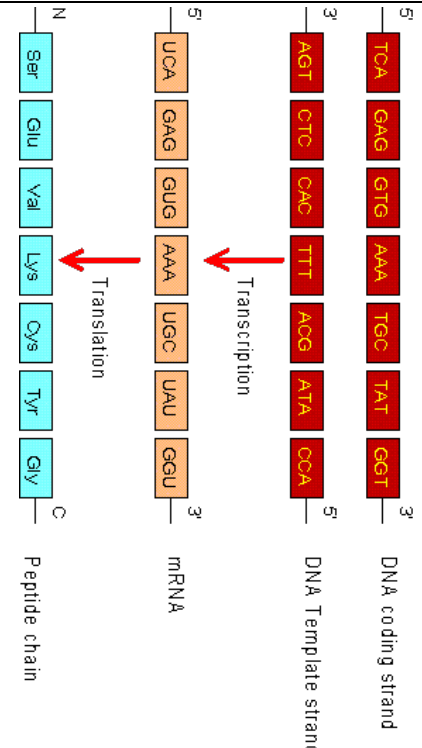
**Codons:** AUG-UCA-GAG-GUG-AAA-UGC-UAU-UGA-GGU



**Amino Acids:** Met-Ser-Glu-Val-Lys-Cys-Tyr-STOP-Gly



**Protein:** Met-Ser-Glu-Val-Lys-Cys-Tyr



2)

**DNA:** TTTATATGGCAAGAGATAATTGTTGA



**RNA:** UUUUAUAUGGCAAGAGAUAAUUGUUGA



**Start Codon:**

UUUUAUAUGGCAAGAGAUAAUUGUUGA



**Codons:** AUG-GCA-AGA-GAU-AAU-UGU-UGA



**Amino Acids:** Met-Ala-Arg-Asp-Asn-Cys-STOP



**Protein:** Met-Ala-Arg-Asp-Asn-Cys

