

See if you can turn the provided DNA code into the correct mature mRNA sequence!

3"

5"

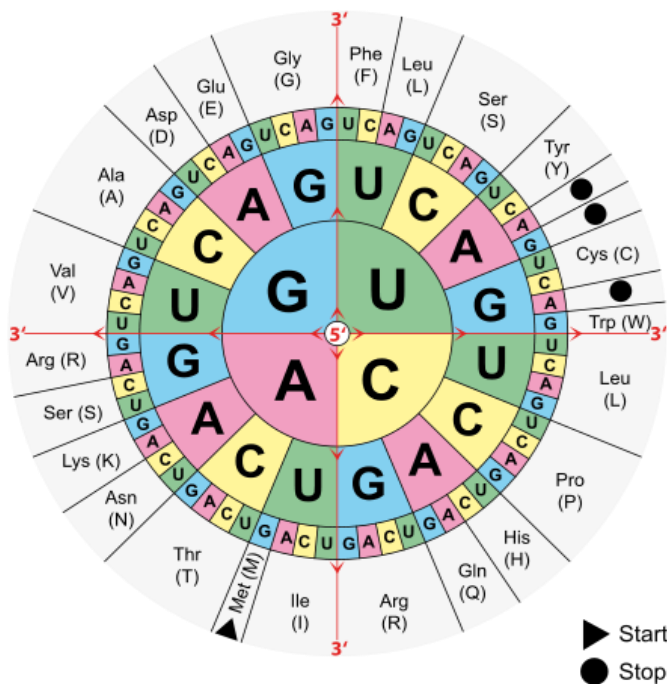
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5" 3"

[illegible]

1. Can you figure out what the first amino acid would be for your mRNA sequence?

2. Can you figure out what the complete protein primary structure would be?



Mr Matthew King

KS5 Biology Translation
WORKSHEET B

These questions will be answered during the live Q&A session. A transcript of answers will be provided after the event.

1. Can you find any other lab-based uses of siRNA?
2. What is the name of this enzyme?
3. What are the products of this reaction?
4. What types of mutation could occur here?
5. What are the three mRNA sequences for the three 'stop codons'?
6. What is the smallest protein produced in the human body?
7. What bonds are responsible for the tertiary structure of a protein?
8. What molecule(s) would the vesicle be made from?

Other questions to raise at the Live Q&A

Task

Watch the two videos below with no sound on. Write a suitable narration to explain the process of transcription and translation.

Video 1: Transcription <https://www.stem.org.uk/resources/elibrary/resource/124099/dna-transcription-advanced-detail>

Video 2: Translation <https://www.stem.org.uk/resources/elibrary/resource/124131/translation-advanced-detail>

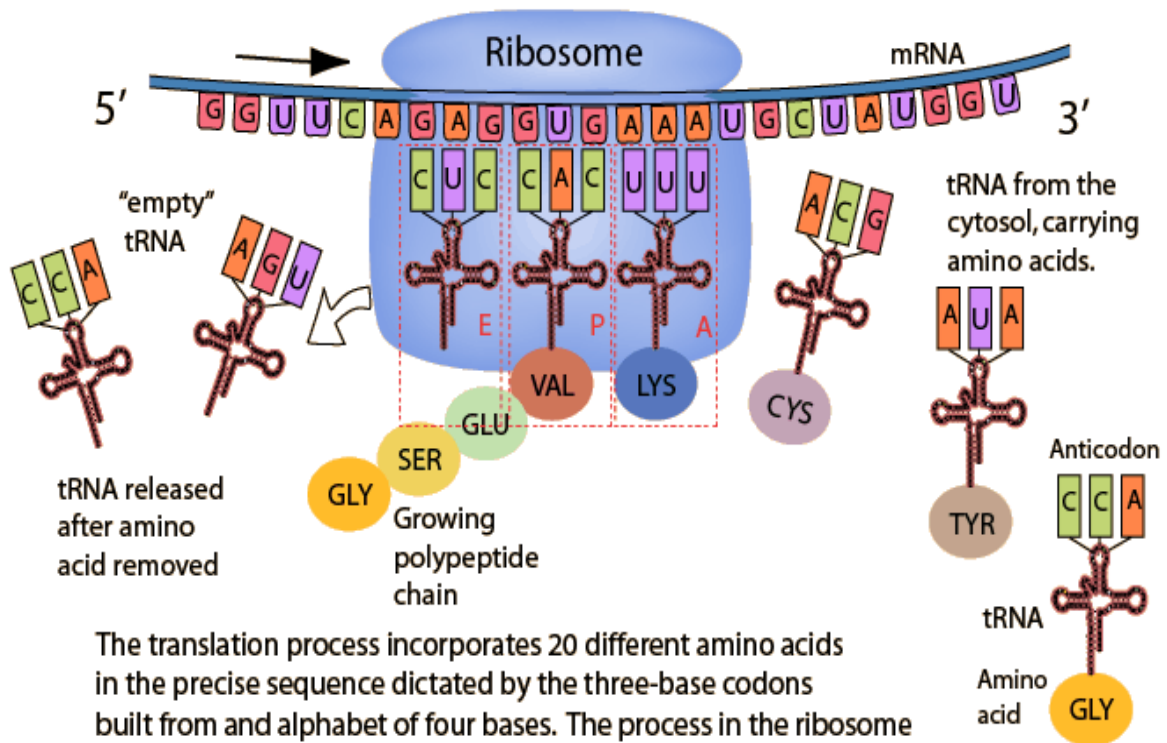
The below information may also help you.

Keywords to use (not in any order!)

Triplet code, mRNA, ATP, mRNA nucleotides, Nucleus, Transcriptional factor, DNA helicase, U, T, tRNA, Anticodon, amino acid, AUG, Stop Codon, Ribosome, vesicle, RNA Polymerase, golgi apparatus, primary structure, tertiary structure

Need additional help? Google 'Transcription and Translation' or use:

<https://owlcation.com/stem/protein-production-a-step-by-step-illustrated-guide>



My Script