

# Protein Synthesis Study Guide

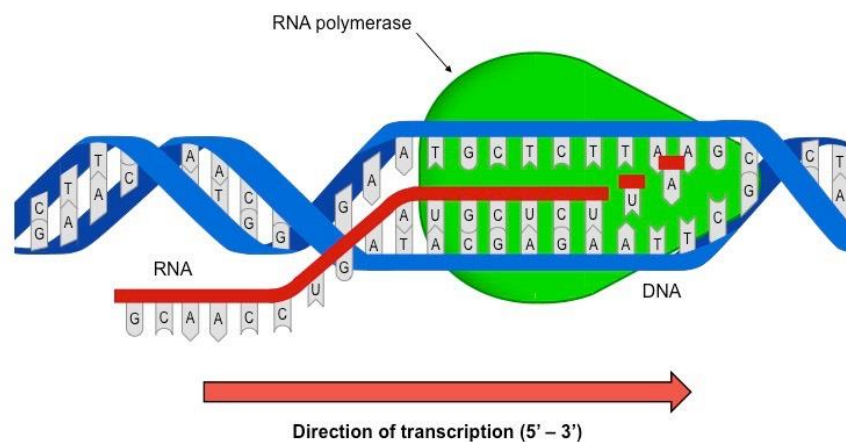
## Make proteins (done by ribosomes)

2 STEPS: transcription & translation

### Step 1: Transcription

Occurs in the Nucleus

DNA is converted to mRNA (m = messenger)



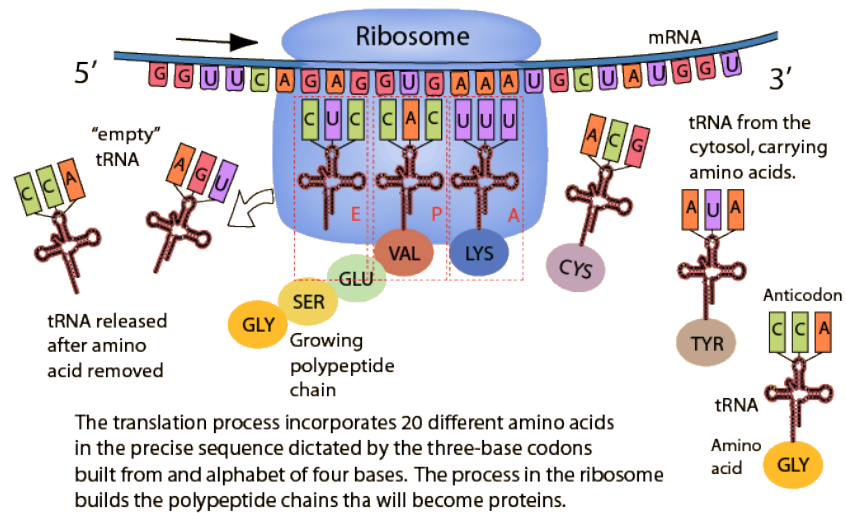
### Step 2: Translation

Occurs in the cytoplasm and ribosomes

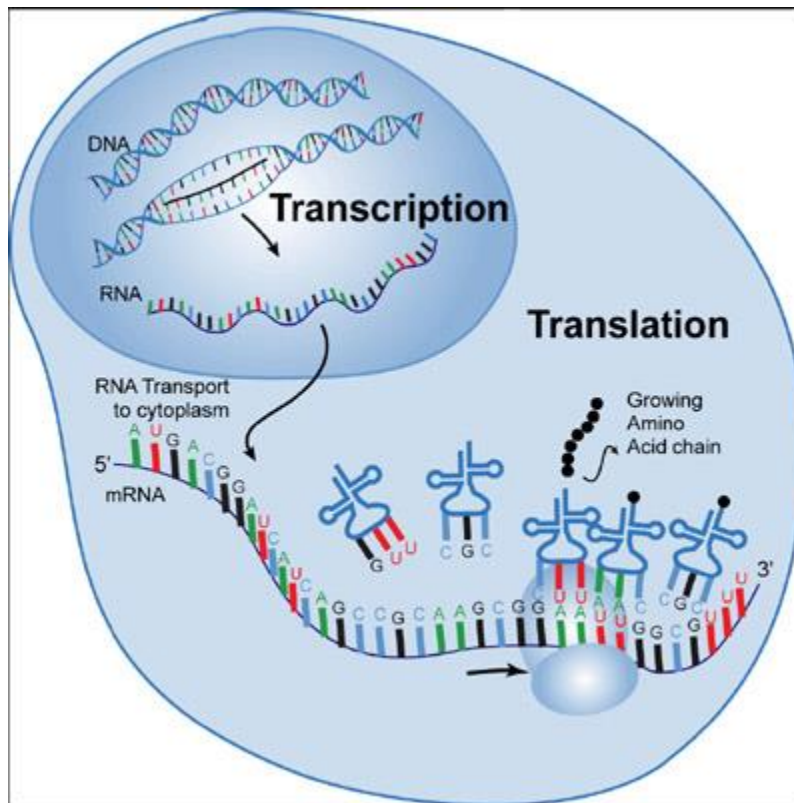
mRNA carries the genetic code from the nucleus to the ribosome

tRNA picks up amino acids and carries them to the ribosome (t=transfer)

When mRNA and tRNA get to the ribosome, the ribosome can make proteins



# Entire Process



Transcription: DNA to mRNA (in nucleus)

Translation: mRNA & tRNA to amino acids (in ribosome)