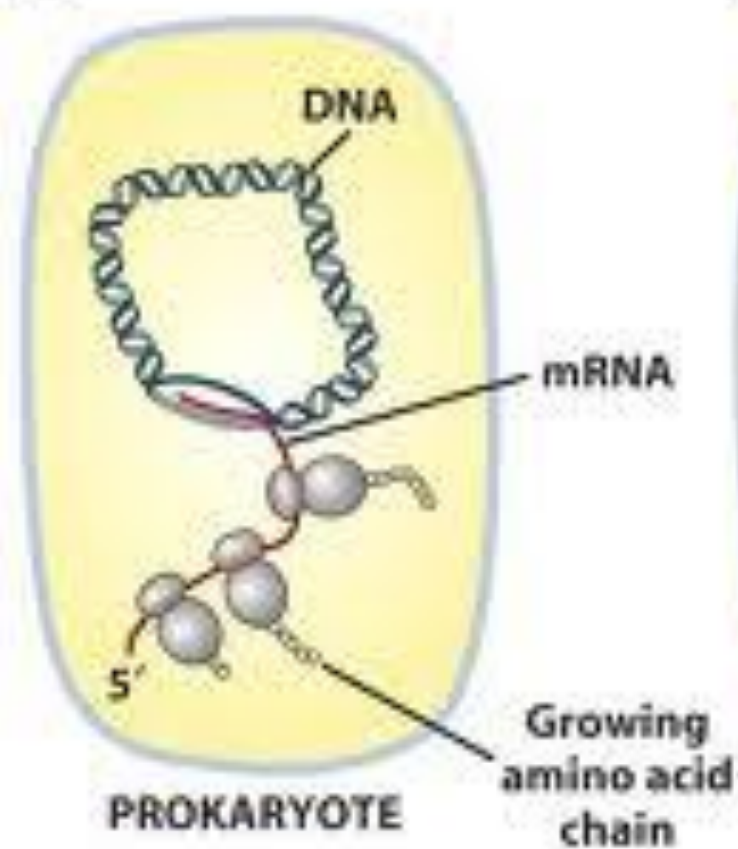
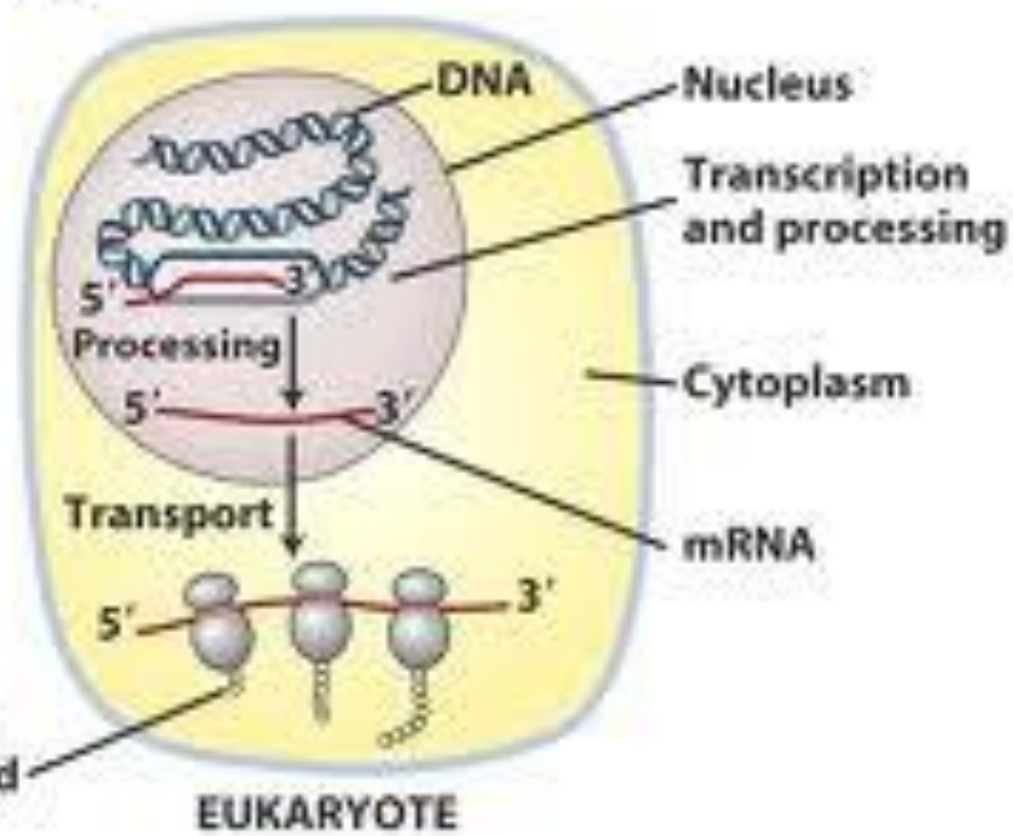


- 
- *Ribosomes (complex particles that facilitate orderly linking of amino acids into polypeptide chain): sites of translation*
    - *In prokaryotes, mRNA produced by transcription is immediately translated without more processing (ribosomes not separated from DNA by membrane)*
    - In eukaryotic cell, nuclear envelope separates transcription from translation (which occurs in cytoplasm)
      - Eukaryotic initial RNA transcripts from any gene (**pre-mRNA** or **primary transcript**) are modified through RNA processing to yield finished mRNA

(a)



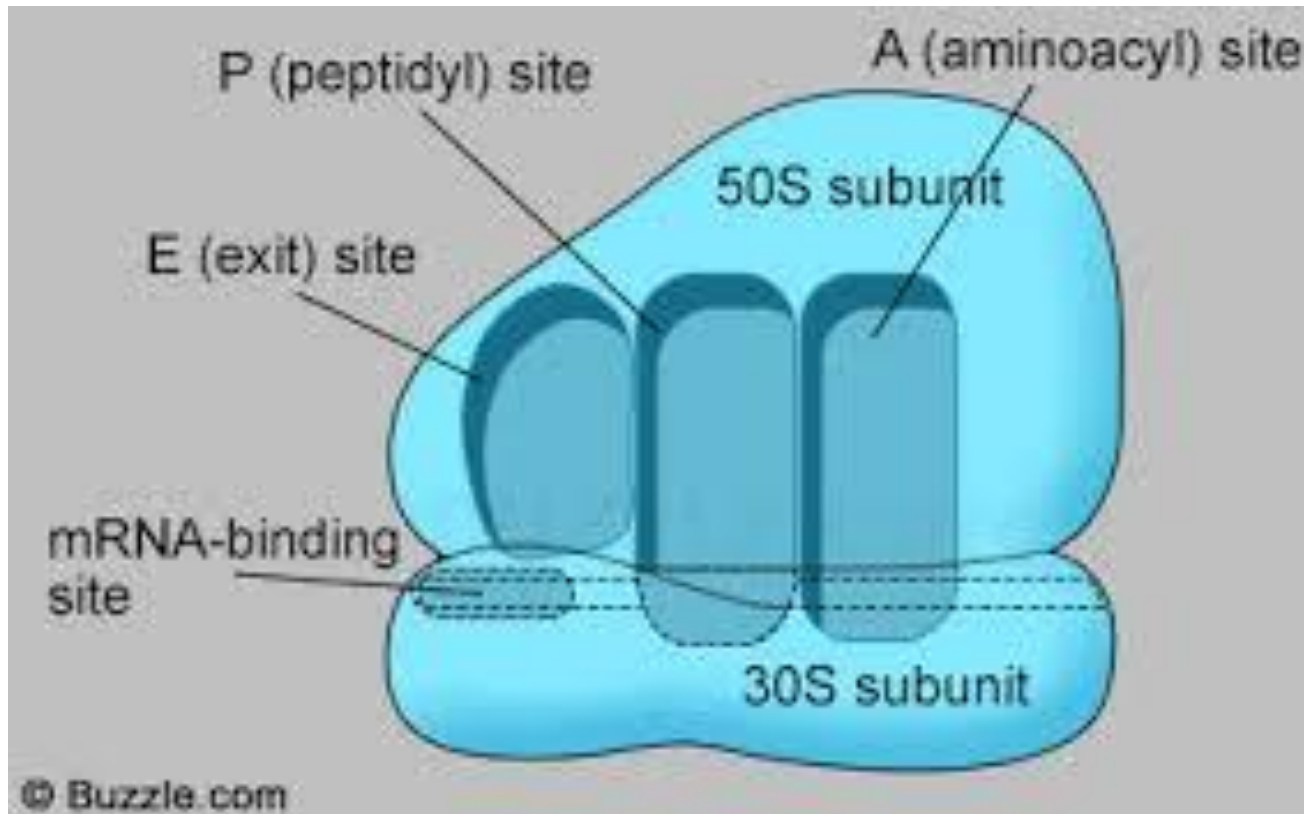
(b)



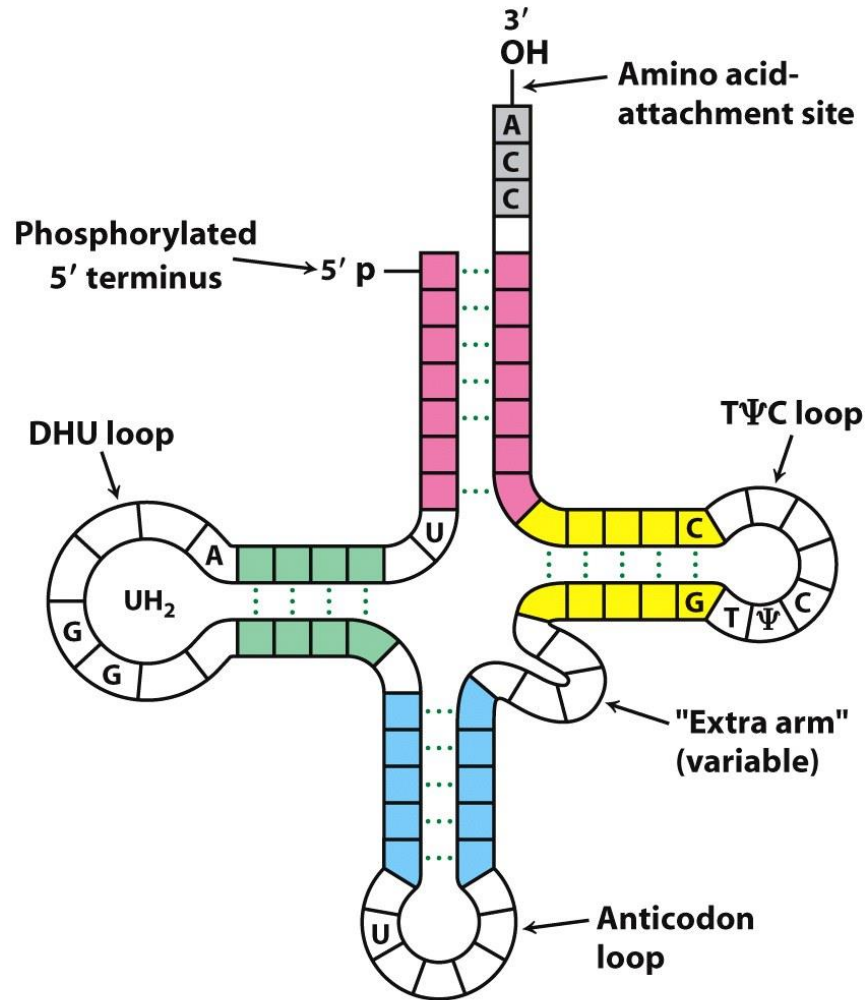
# Processes in translation

- Activation of amino acids
- Formation of aminoacyl-tRNA
- Stages of translation- initiation, elongation, termination
- Modification of formed polypeptide chain

# Ribosome of prokaryote

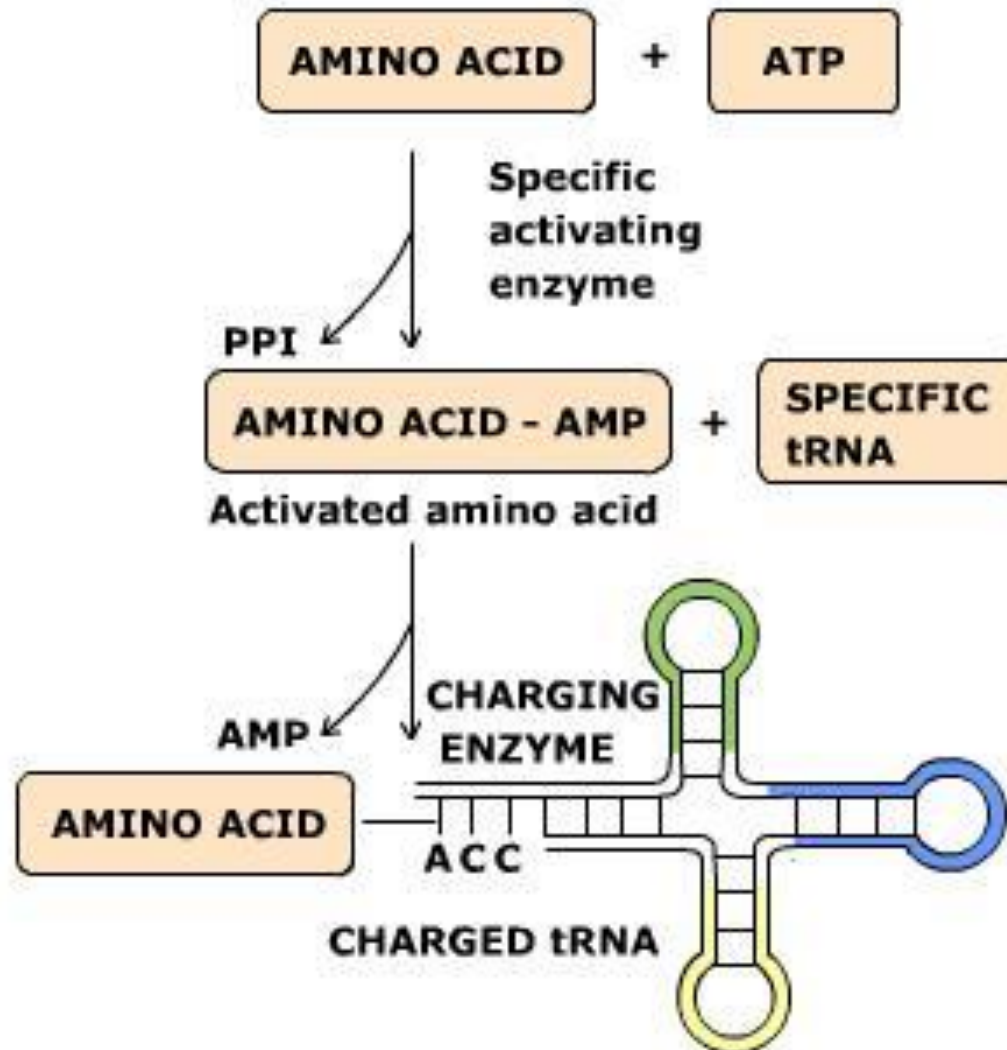


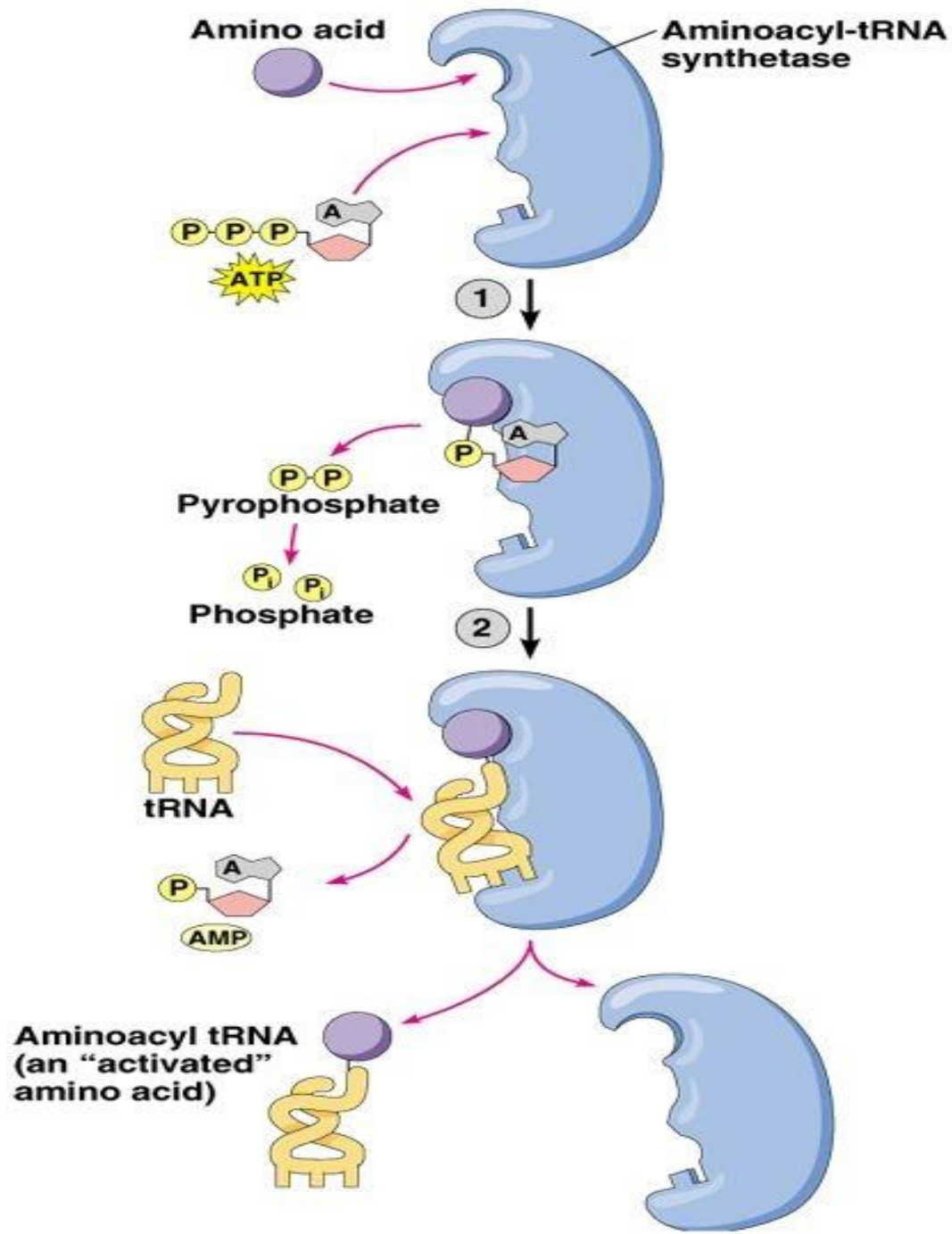
# tRNA



**Figure 30.3**  
*Biochemistry, Seventh Edition*  
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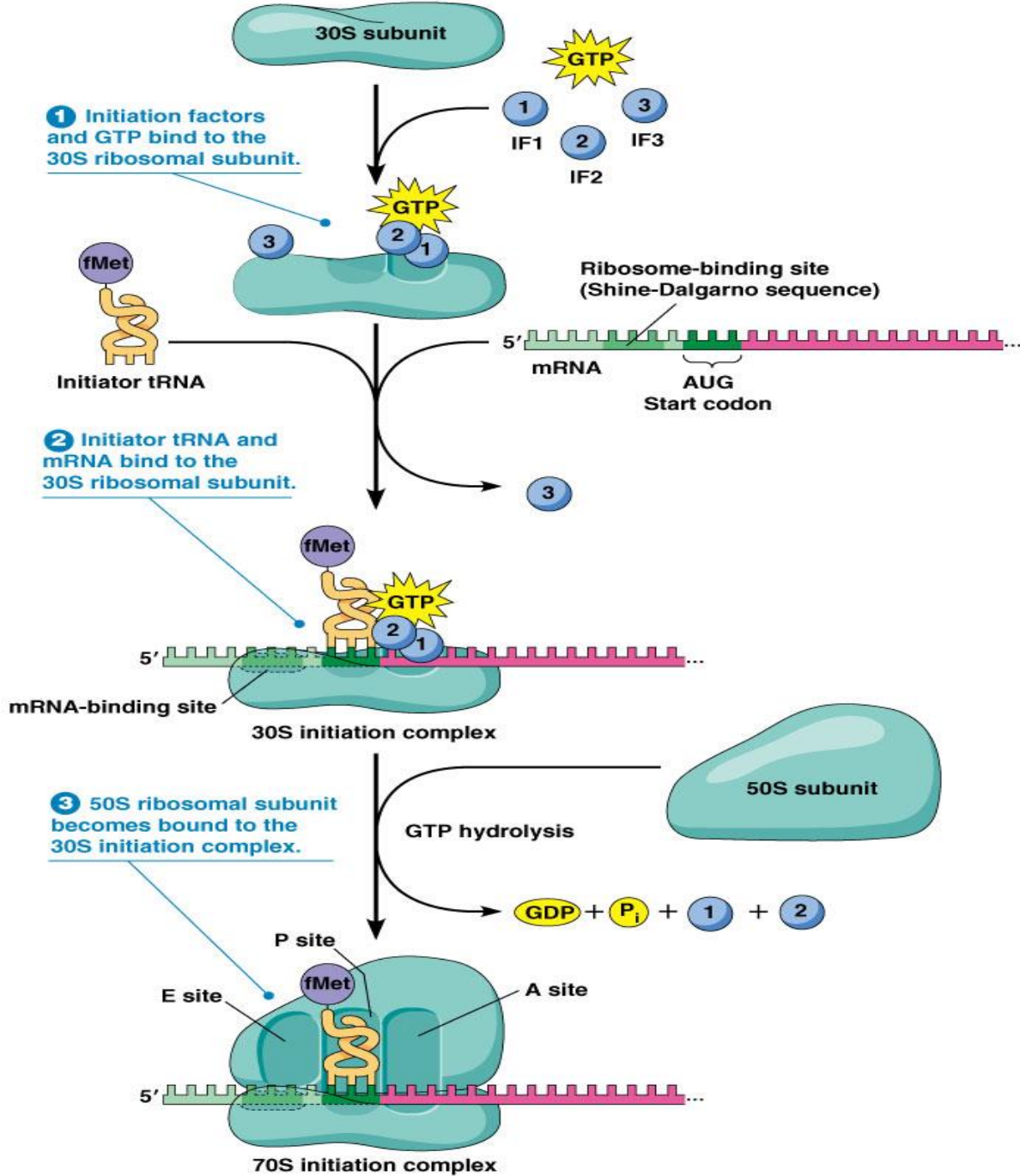
# Activation of AA and formation of aminoacyl -tRNA



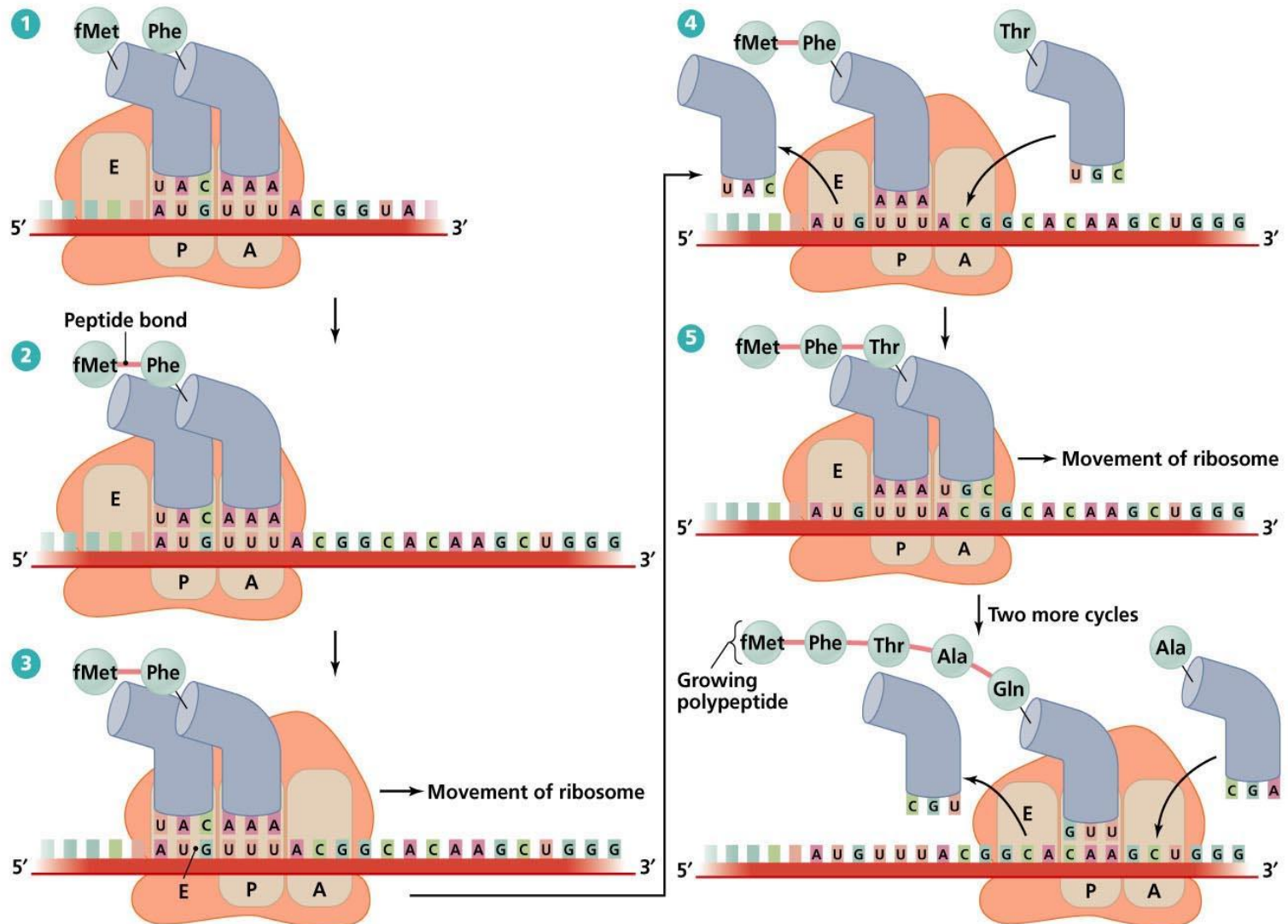




# Initiation



# Elongation



# Termination

