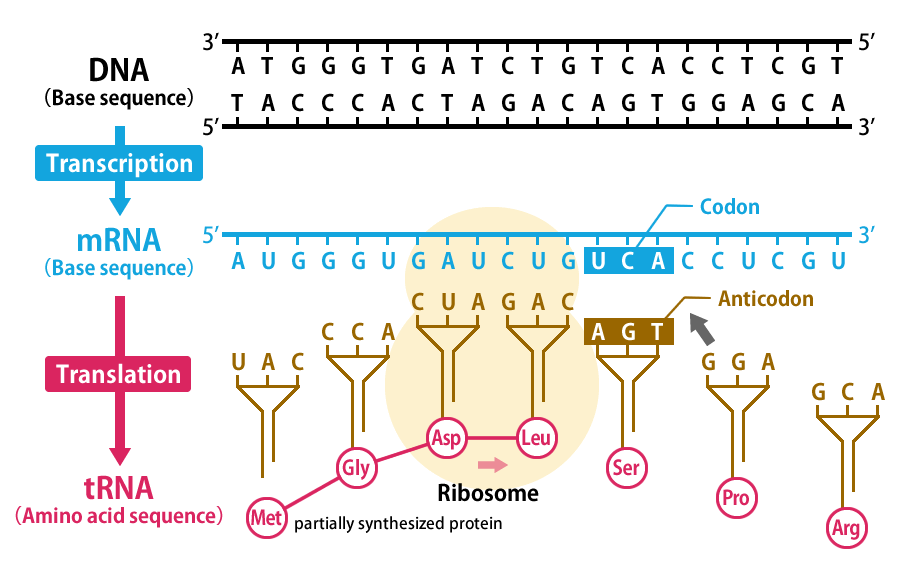
BIO 40S – DNA TEST REVIEW

**Key topics in the unit:**

* Structure of DNA
* Protein Synthesis
* DNA replication
* Mutations
* Ethics

**In order to be successful on the test, make sure you know:**

* The differences between DNA and RNA
* The differences between amino acids and proteins
* How to read a DNA strand in protein synthesis (DNA→ mRNA→ tRNA→ amino acids)
* The steps involved in transcription and translation
  + Where it occurs
  + How to read a codon chart
  + The difference between mRNA and tRNA
  + Base pairs
* How DNA replication works
  + Enzymes involved and what they do
  + Okazaki fragments
  + Differences between the leading and lagging strands
  + Directions of each strand
  + Diagram
* Types of mutations and how they affect protein synthesis
  + Point (3 types)
  + Frameshift (2 types)
* You will be required to answer an opinion-based question on the ethics behind DNA and genetics

