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

