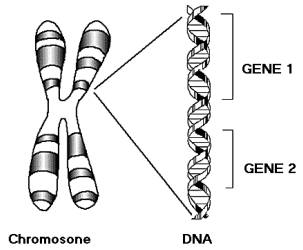
Bio I
Notes: Protein Synthesis – Introduction and Transcription

Review DNA (terms: chromatin, histones, chromosome, chromatid, centromere, genes



Ribonucleic acid (RNA)

DNA versus RNA

	DNA	**RNA**
Number of Strands		
Sugar		
Bonds with adenine		

Components of a ribonucleotide (RNA nucleotide)

1.
2.
3.

Three types of RNA

1.
2.
3.

Protein synthesis:

- Review proteins:

- Brief summary:

Process of DNA to proteins is better known as **gene expression.**

Two stages of protein synthesis (gene expression)

1.
2.

Transcription

- Summary of process:

- Location:

- Process / Simulation

1.

- DNA strand:

T	***A***	***C***	***G***	***C***	***G***	***C***	***C***	***T***	***A***	***G***	***G***	***A***	***A***	***A***	***T***	***G***	***G***	***A***	***G***	***T***

- Template versus non-template strand:

2.

DNA template strand

T	***A***	***C***	***G***	***C***	***G***	***C***	***C***	***T***	***A***	***G***	***G***	***A***	***A***	***A***	***T***	***G***	***G***	***A***	***G***	***T***

mRNA

DNA non-template strand

3.

mRNA

T	***A***	***C***	***G***	***C***	***G***	***C***	***C***	***T***	***A***	***G***	***G***	***A***	***A***	***A***	***T***	***G***	***G***	***A***	***G***	***T***

DNA strand

Why mRNA kept in groups of three?

Comparing DNA Replication to Translation