



TT

Universal

DNA is Universal, Non-Overlapping & Degenerate

- 1
- 2
- 3
- 4
- 5

Non-overlapping



Degenerate



Genome



Proteome



Transcription

Protein Synthesis

Translation





DNA, Genes & Chromosomes

TT

Gene

Locus

DNA Triplet

Eukaryotes →

→

→

→

→

Prokaryotes →

→

→

→

→

Mitochondria + Chloroplasts

→

→

→

— .
— .

— .
— .

— — .
— — .

Not all DNA codes for proteins / polypeptides / functional RNA

→

↳

Protein Synthesis : Transcription

1 2 3 4 5



TT

Exons

Splicing

DNA Helicase

Hydrogen Bonds

Complementary
Base Pairing

RNA Polymerase



Prokaryotes vs. Eukaryotes

Prokaryotes: →

→

Eukaryotes:

→



TT

Codon

Protein Synthesis - Translation

- 1
- 2
- 3
- 4
- 5

Anticodon

