

Structure of Cells

The Cell as a Factory

What are Cells Made of?

How is a Cell Assembled?

Central Dogma of Biology

What is DNA?

Structure of Nucleotides

Nucleotides Polymerize to Form Nucleic Acids

Base-pairing Controls Formation of Second Polymer Chain

Base-complementation Allows DNA Replication

The Two Strands of DNA are Complementary

Central Dogma of Biology

What are Proteins?

Proteins Have Many Functions in Cells

Proteins Make Cellular Structures

What are Amino Acids?

Amino Acids Polymerize to Form Proteins

Sequence of Protein Dictates its Folding Pattern

How Does DNA Specify the Sequence of a Protein?

Central Dogma of Biology

Two Types of RNA

Information Flow in Protein Synthesis

Where Do Genes Start and Stop?

Synthesis of RNA

Understanding the Genetic "Code"

Genetic Code is Translated by Two Sequential "Adaptors"

Proteins are Made on Ribosomes

Information Flow is Simpler in Prokaryotes

The Structure of Genes in Eukaryotes Can Be Complex

Relationship Between Genes and Proteins

So What is Next?