

**DNA, RNA and Protein Synthesis worksheet**

What is the name of the replication method of DNA?  
Semi-conservative replication

In DNA, adenine pairs with thymine, and guanine pairs with cytosine.

Draw a strand of DNA. Draw the complementary strand of DNA.

5'-T-A-C-A-T-T-G-A-A-T-T-G-G-A-T-T-T

3'-A-T-G-T-A-A-C-C-A-A-T-T-C-C-T-A-A-A

Name the three types of RNA: mRNA, rRNA, tRNA

Name the two parts of protein synthesis:

Transcription

Translation

The making of mRNA from DNA is called transcription.

Where does transcription take place?  
In the nucleus

Where does translation take place?  
In the cytoplasm

The three steps of translation are initiation, elongation, and termination.

What carries the amino acids to the ribosome?  
tRNA

What helps put the amino acids together at the ribosome?  
rRNA

It is base pairing codes for the amino acid

What is the name of this sequence in DNA? codon anticodon  
DNA: triplet mRNA: codon tRNA: anticodon