

Reading frame: A series of non-overlapping read in order by a cell; 3 different reading frames are possible for each mRNA molecule; Codons must be read in the correct reading frame order for the correct protein to be made.

Triplet Code

Common Language: The genetic code is shared by almost all organisms.

Codon: A 3 nucleotide sequence of mRNA nucleotides that code for a corresponding amino acid.

Start codon: signals the start of translation at the ribosome and always begins with methionine.

Stop codon: 3 possible codons that signal the end of translation at the ribosome.

Ribosome: The site of protein synthesis; made of rRNA & proteins; Catalyzes the formation of peptide bonds between amino acids.

- The large subunit binds to tRNA
- The small subunit binds to mRNA

Anticodon: A 3 nucleotide sequence on a tRNA molecule carrying amino acids that corresponds to the complementary mRNA molecule at the ribosome.

Transfer RNA (tRNA): A type of RNA that carries amino acids from the cytoplasm of the ribosome; one end has a specific anticodon that corresponds to an mRNA molecule and the other end attaches to the specific amino acid coded for by the mRNA.

Translation

