

Power Notes 8.4: Transcription

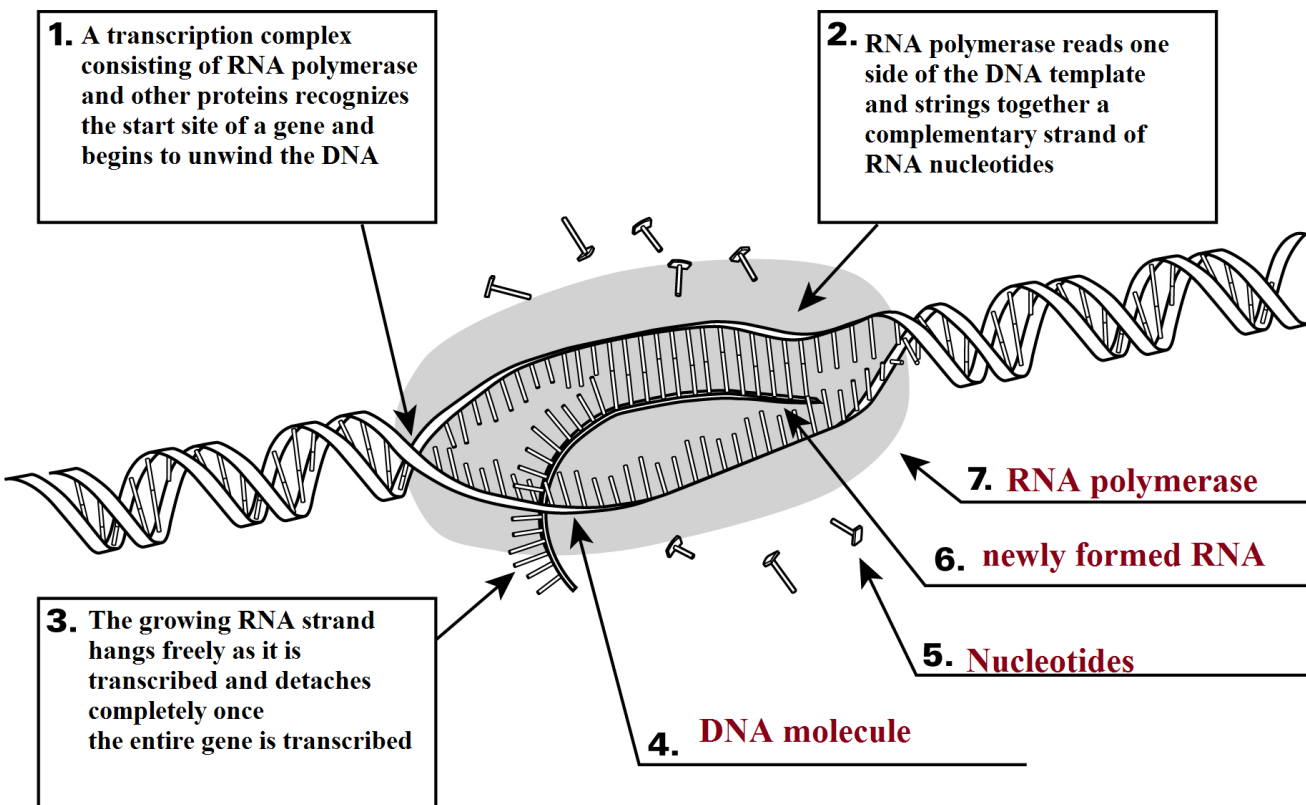
Central Dogma



<p>DNA:</p> <ul style="list-style-type: none"> • deoxyribose sugar • A, T, C, G • Double- stranded 	<p>RNA:</p> <ul style="list-style-type: none"> • ribose sugar • A, C, U, G • Single-stranded
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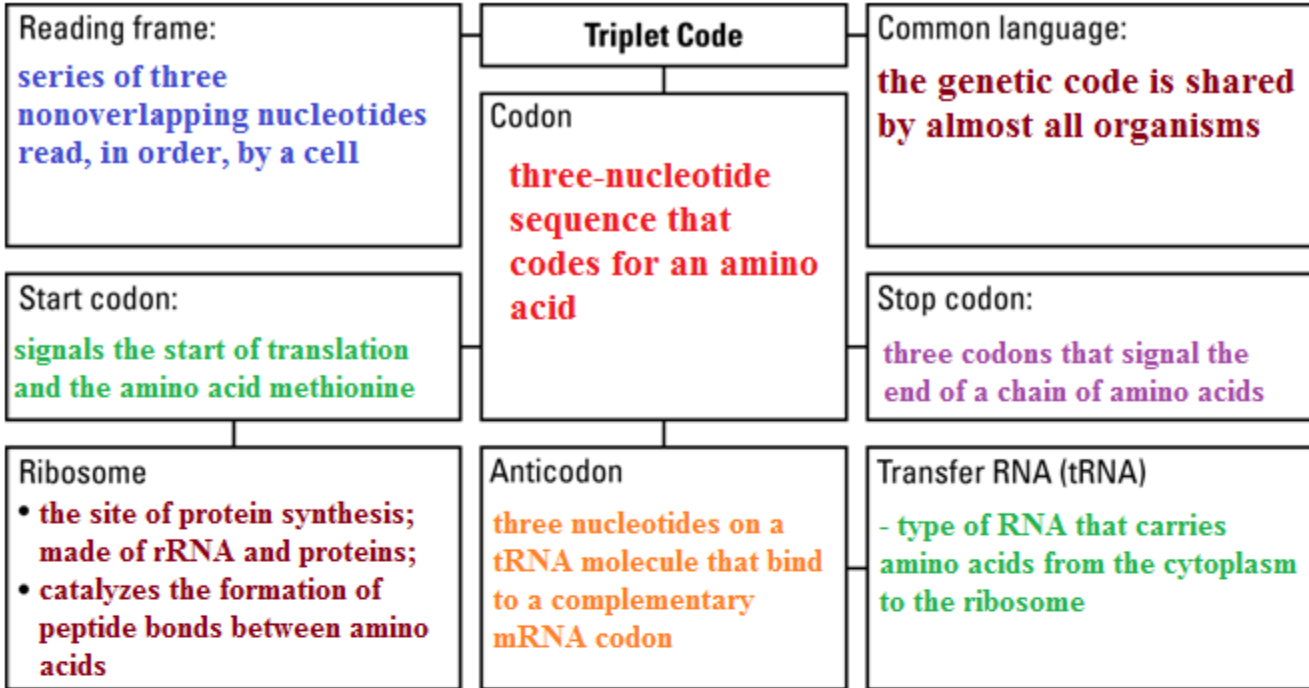
Transcription

Label the parts on the lines below. Summarize the steps of transcription in the boxes.

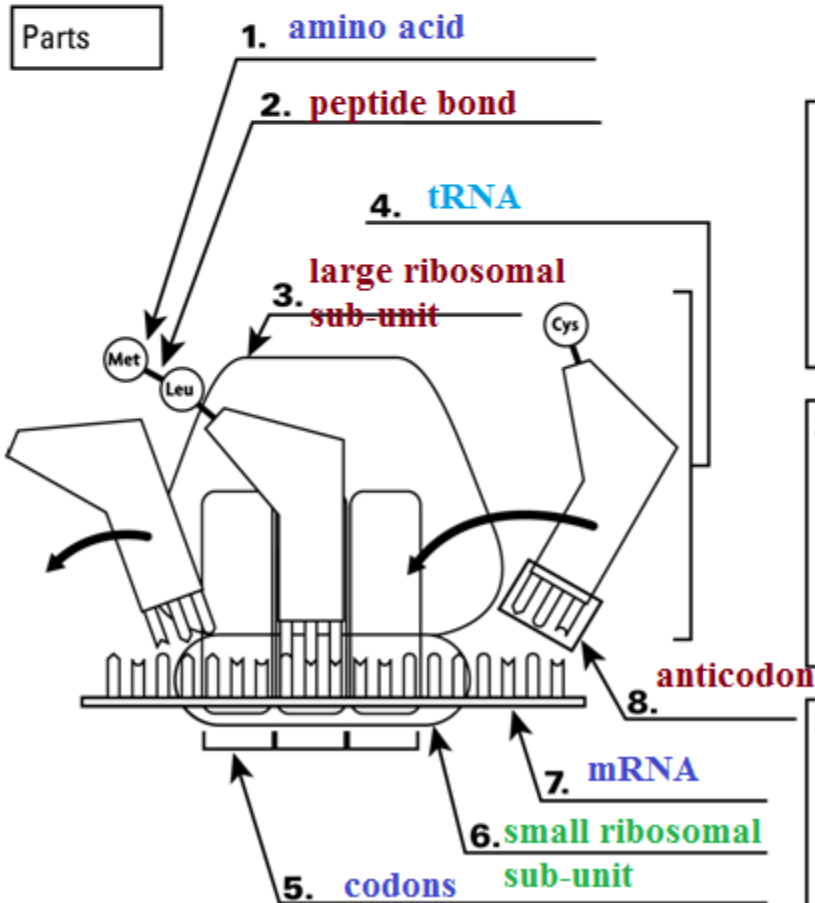


RNA Type	Function
1. Messenger RNA (mRNA)	intermediate message that is translated to form a protein
2. ribosomal RNA (rRNA)	forms part of a ribosome
3. transfer RNA (tRNA)	brings amino acids from the cytoplasm to a ribosome to help make the growing protein

PowerNotes 8.5 Translation



Translation



Process

- ribosome assembles at the start codon;
- complementary tRNA molecule pairs with the exposed codon
- ribosome helps bond the new amino acid to the start codon and breaks the bond between the amino acid and the first tRNA
- ribosome pulls the RNA strand the length of one codon;
- first tRNA returns to the cytoplasm; another codon is exposed for tRNA binding