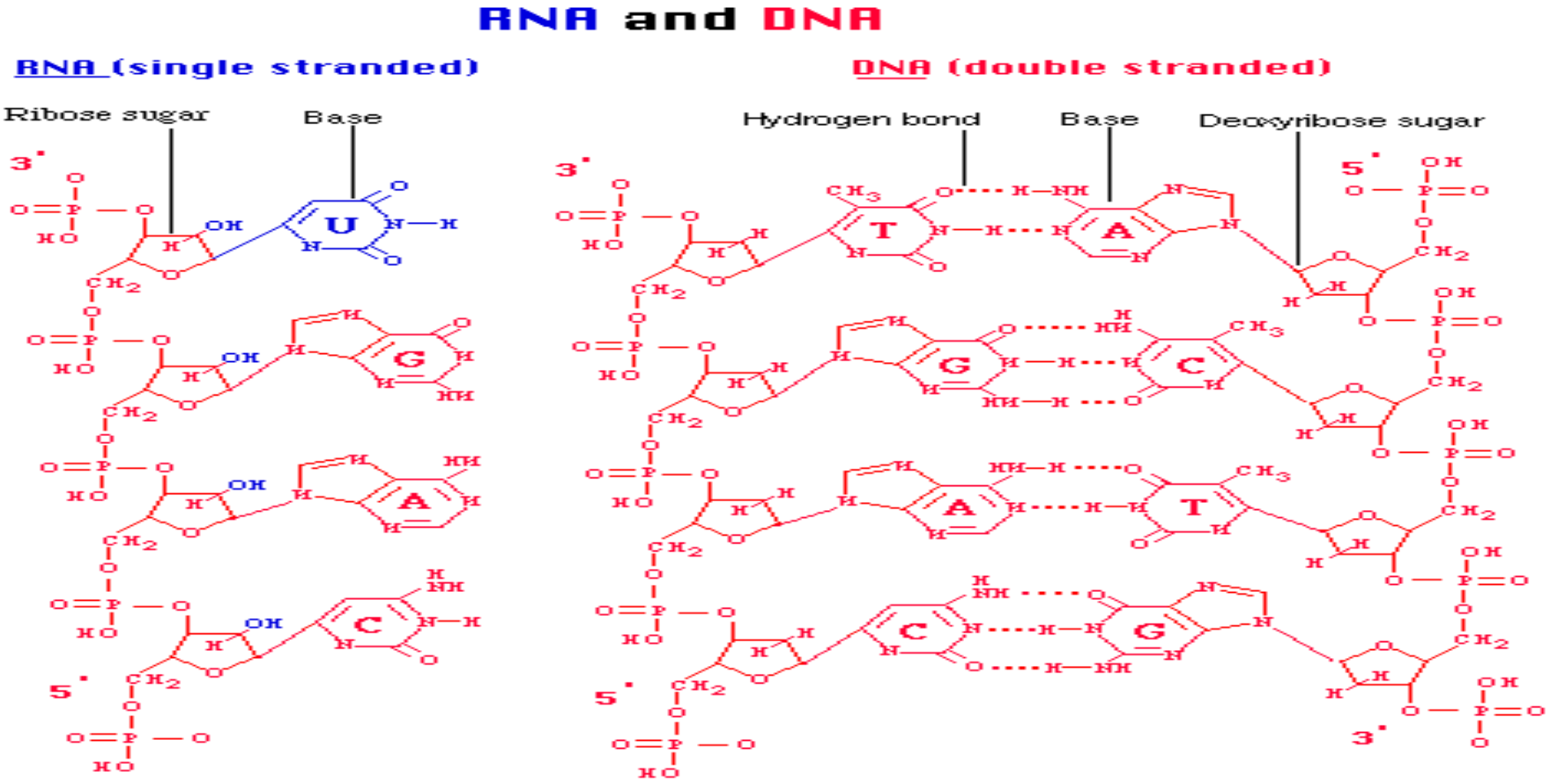
RNA *VS* DNA

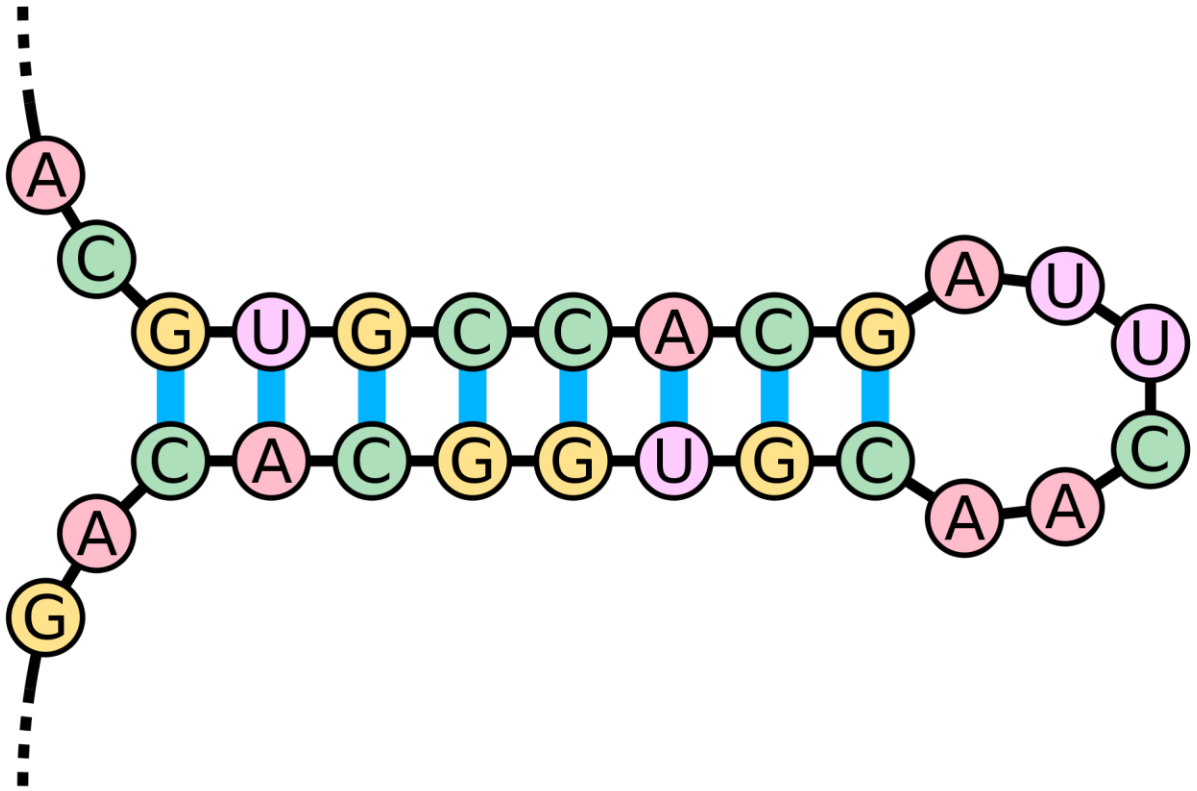
- DNA and RNA are two different nucleic acids found in the cells of every living organism.
- DNA and RNA structure are similar because they both consist of long chains of nucleotide units.
- However, there are a few structural details that distinguish them from each other…

RNA is single stranded, DNA is double stranded

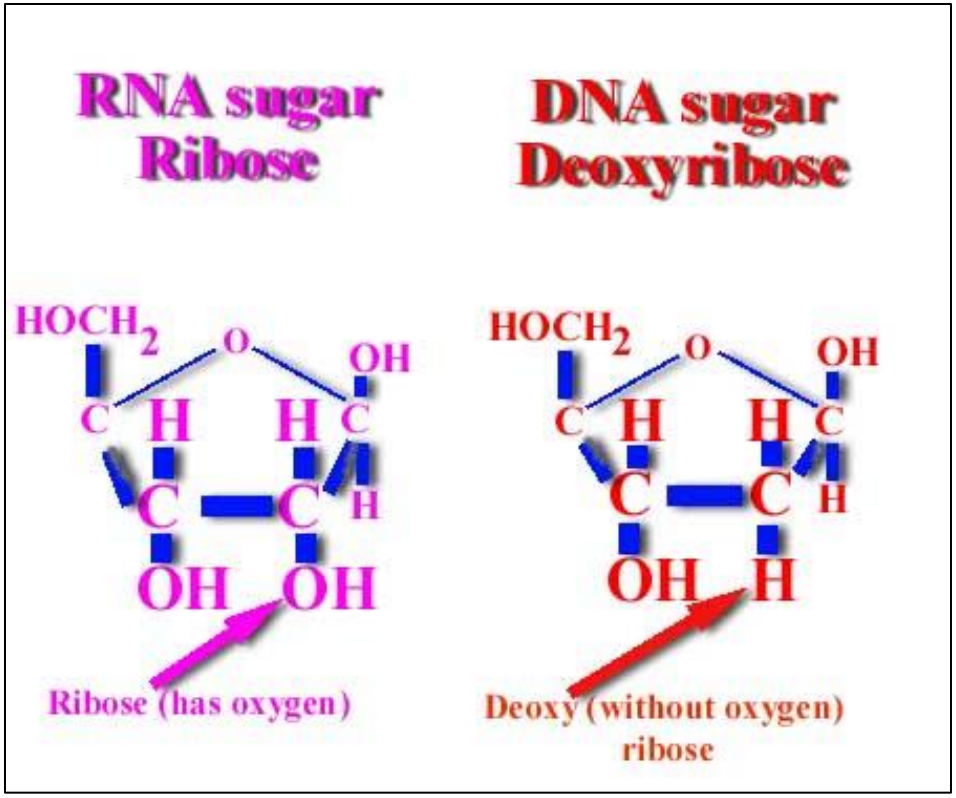


Although, sometimes a strand of RNA can base pair with itself

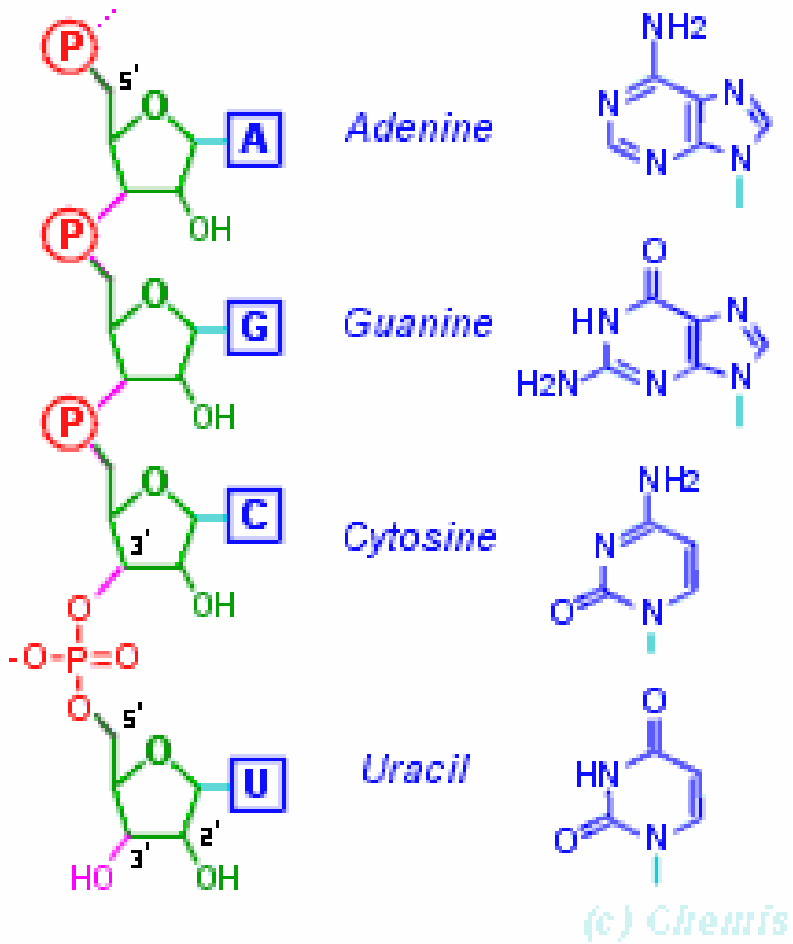
See how this is one strand that has bent back to bond with itself?

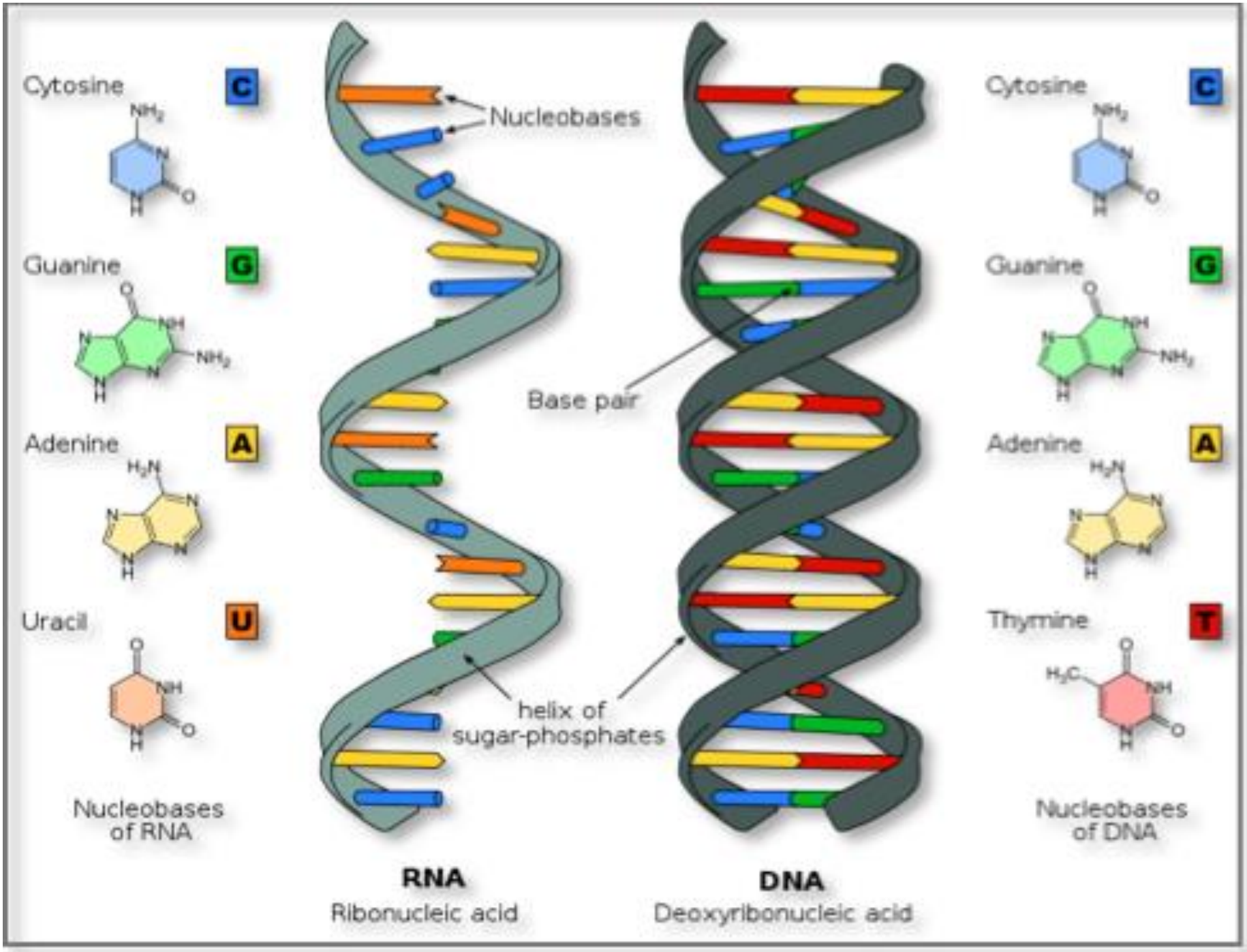


- RNA has ribose sugar, not deoxyribose sugar



- RNA bases are A, G, C and U (uracil), no T
  - Uracil is a pyrimidine and forms two hydrogen bonds with adenine




Cytosine
C
Guanine
G
Adenine
A
Uracil
U
Nucleobases of RNA
Nucleobases
Base pair
helix of sugar-phosphates
RNA
Ribonucleic acid
DNA
Deoxyribonucleic acid
Cytosine
C
Guanine
G
Adenine
A
Thymine
T
Nucleobases of DNA