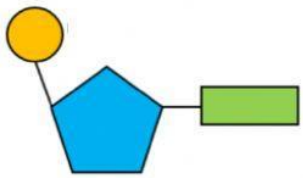
Deoxyribonucleic Acid (DNA) is a _____. The monomer of this molecule is a _____. The monomer consists of three parts: a _____ group, a deoxyribose _____, and one of four _____.

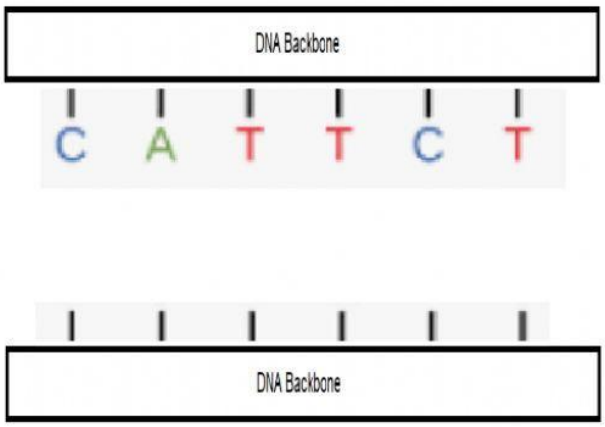


Chargaff discovered the base pairing rules for DNA. He found that the amount of adenine is about the same as the amount of thymine, and the amount of guanine is about the same amount of cytosine. Therefore A = ____ and C = _____. Given one percentage, you can figure out how much of the other three bases are present. All four bases should add up to 100%

	% Thymine	% Guanine	% Adenine	% Cytosine
Example 1:	31 %			19%
Example 2:			26%	
Example 3:		21%		

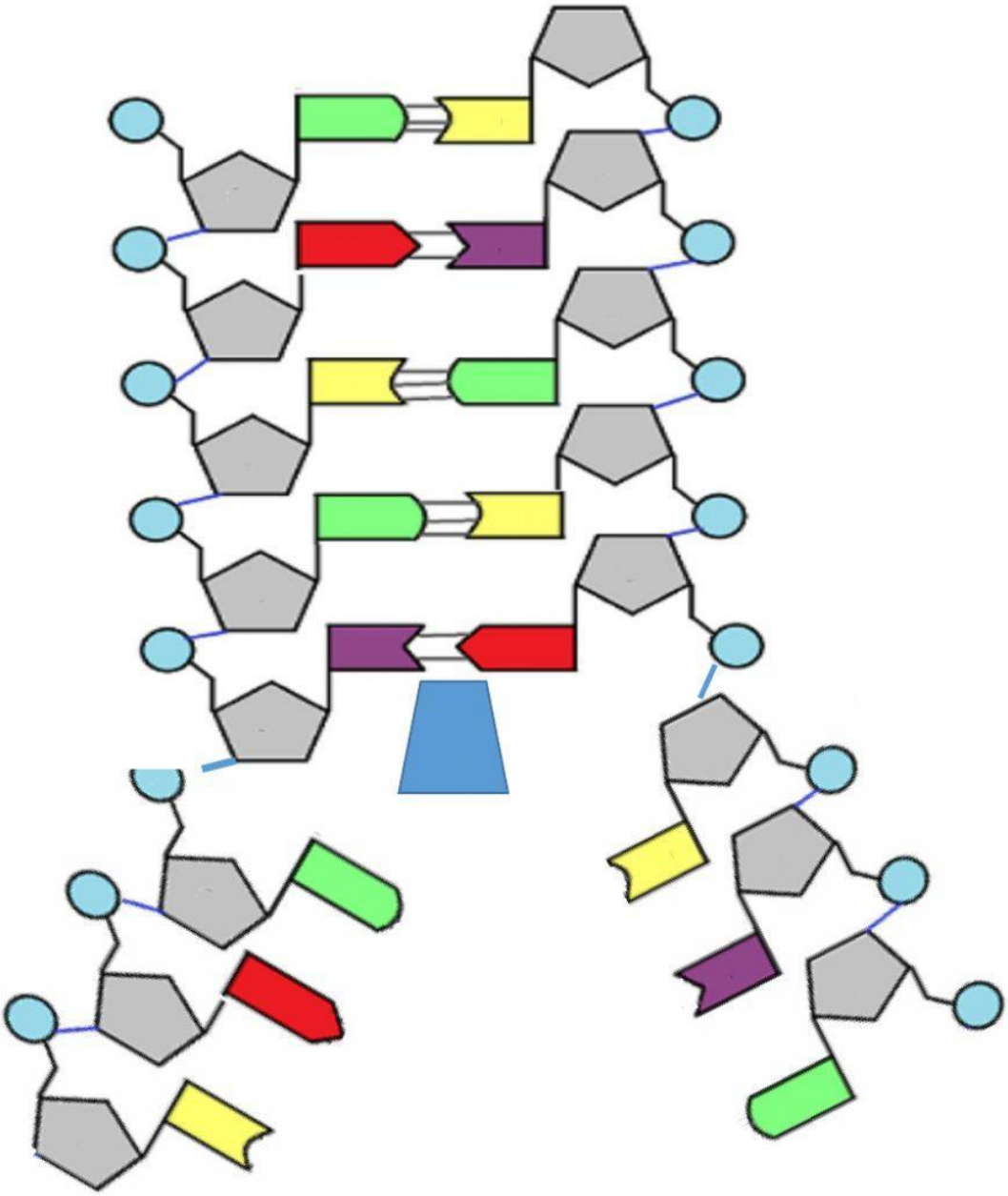
DNA is a _____, where the nitrogen bases from one side are bonded to the nitrogen bases on the other side by _____. DNA is replicated in a eukaryote cell during the _____ of _____ before cell division can occur.

In order for replication to occur, the double helix must be unwound. The enzyme _____ breaks the hydrogen bonds between the N-bases. Another enzyme. _____, brings the complementary nucleotide to the exposed strand. For example – if the template strand has A, then _____ would be brought over; if the template strand has a C, then the ____ would be brought over.
Once, the strands are rebuilt, _____ will glue the backbone together. Each of the new molecules will each have one original strand and one new strand, this is referred to as _____.

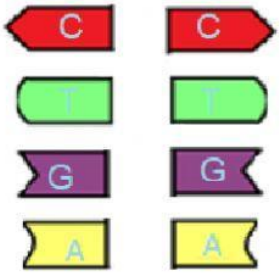


Write the correct complementary strand.

LIVEWORKSHEETS



Move the N-bases to the correct complementary base on the DNA template strands.



Which enzyme brings the complementary nucleotide bases to the template strand?

_____

LIVEWORKSHEETS