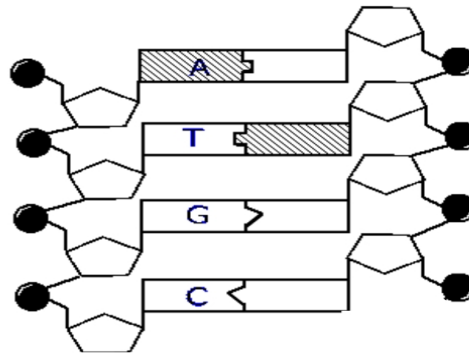


DNA Structure, DNA Replication, and Protein Synthesis Review

1. A nucleotide is made of three parts: a _____ group, a five carbon _____, and a nitrogen containing _____.
2. In a single strand of DNA, the phosphate group binds to the _____ of the next group.
3. The 5' end of a single DNA strand contains a free _____, while the 3' end contains a free _____.
4. Purines have _____ rings, and pyrimidines have _____ ring.
5. Write out the complete name for DNA: _____

On the diagram:

- Label the 3' and 5' ends.
- Circle a nucleotide.
- Label the sugar and phosphate.
- Label the bases that are not already labeled.



6. The two sides of the DNA helix are held together by _____.
7. The purines are _____ and _____; the pyrimidines are _____ and _____.
8. The term used to describe how the two strands of DNA are oriented is _____, which means _____.
9. In a strand of DNA, the percentage of thymine is 30 %. What is the percentage of cytosine? _____ Adenine? _____ Thymine? _____