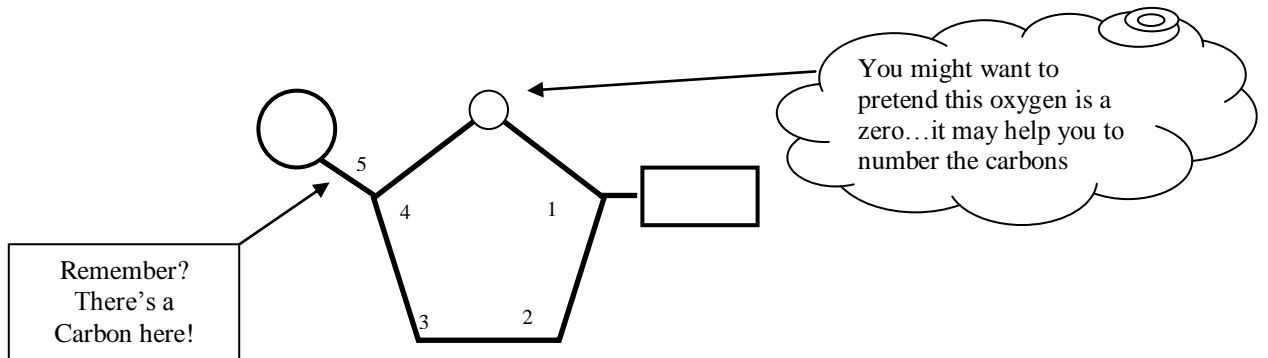


Replication of DNA

KEY

3. Define what nucleoplasm is: THE CYTOPLASM-LIKE SUBSTANCE IN THE NUCLEUS.
4. In what way is the task you just did a SEMICONSERVATIVE replication? 1/2 THE PARENT STRAND IS "CONSERVED" OR USED IN THE NEW STRAND.
5. Draw in the oxygens on ALL the deoxyriboses.
6. Number the carbons on 3 nucleotides of each new DNA strand.



7. When a DNA strand replicates, the new nucleotides can only be added in ONE direction. With the oxygens pointing UP, this direction is downwards (just as I had you build your replicas). Biologically speaking this is termed 5-prime to 3-prime. (or 5' to 3')

The 5' end is the one with the #5 carbon closest to the top (oxygen at top). The 3' end is the one with the #3 carbon closest to it.

Label the 5' and 3' ends of each strand of each new DNA molecule.