

**Figure 1.** Molecular structure of nucleotides, showing phosphates and sugars. (DR=deoxyribose; R=ribose. Ribose and deoxyribose are different forms of 5-carbon sugars). At each ‘bend’ in the chemical structure without anything labelled, there is a carbon atom (see Figure 2). Source: <http://a.2002-acura-tl-radio.info/page-a/diagram-of-nucleotide-gene-78006.html>

|  |  |
| --- | --- |
| 9.1 The Structure of DNA – Concepts of Biology-1st Canadian Edition – Molnar  **Figure 2.** Complete chemical structure (including carbon atoms) of *nitrogenous bases only* (phosphates and sugars absent). Source: https://opentextbc.ca/conceptsofbiology1stcanadianedition/chapter/9-1-the-structure-of-dna/ | Phosphodiester bond - Wikipedia  **Figure 3**. Successive nucleotides are linked by phosphodiester bonds, where the phosphate’s oxygen atoms bond covalently with carbon atoms on the 5-carbon sugars. Source: https://en.wikipedia.org/wiki/ Phosphodiester\_bond |