

- 4 (a) Fig. 4.1 shows a phosphorylated nucleotide which is one of the monomers that is used to synthesise DNA during replication.

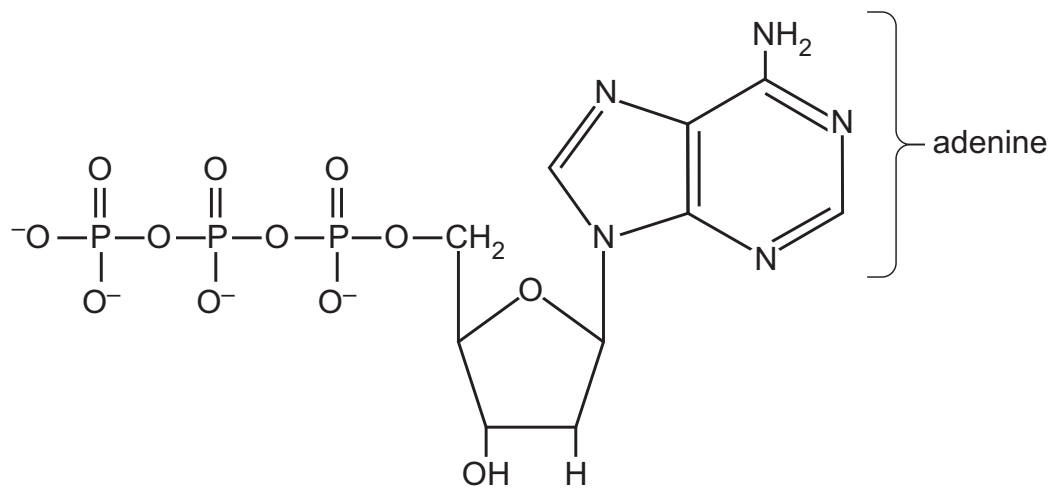


Fig. 4.1

- (i) State the meaning of monomers of DNA.

..... [1]

- (ii) State how ATP differs in structure from the phosphorylated nucleotide shown in Fig. 4.1.

.....

 [1]

- (iii) State the process occurring in all cells that results in the production of ATP.

..... [1]

- (b) Fig. 4.2 shows a short length of a DNA molecule. One of the strands of the DNA molecule is labelled Y.

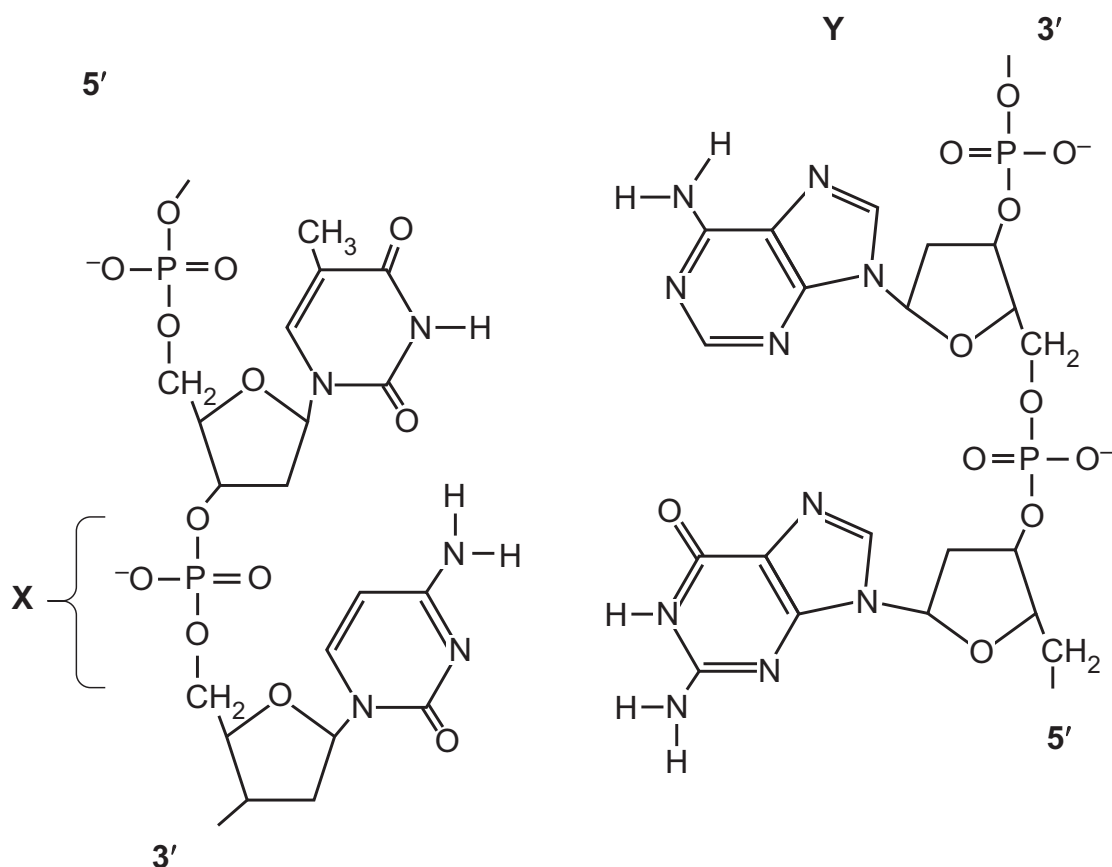


Fig. 4.2

- (i) Complete Fig. 4.2 by drawing dotted lines to represent all the hydrogen bonds between the two strands of the DNA molecule. [2]

- (ii) State the name of the bond X.

..... [1]