

The diagram shows part of a molecule.

This molecule is found in the nucleus of cells.



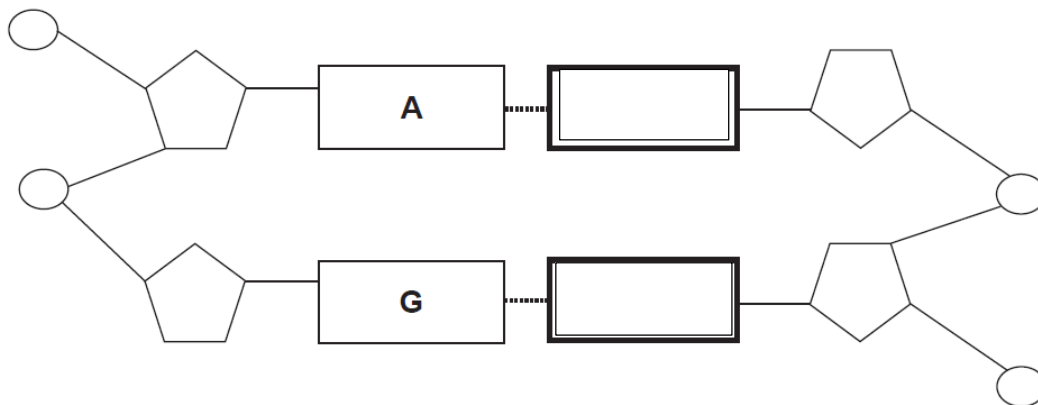
Source: CCEA

Look at the diagram.

(a) (i) Name this molecule.

(ii) What term is used to describe the shape of this molecule?

The diagram shows a section of this molecule.



Look at the diagram.

(b) (i) Draw a circle around a sugar in this molecule.

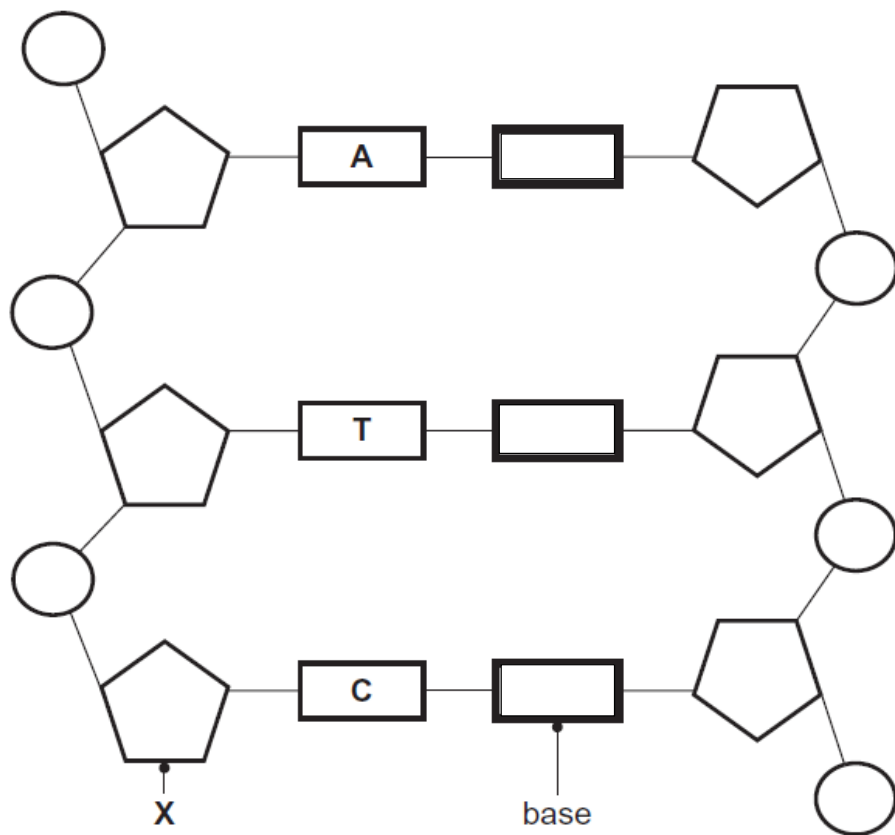
[1]

(ii) **A** and **G** are bases.

Complete the diagram by writing the letter for each matching base in the empty boxes.

[2]

The diagram shows part of a DNA molecule.



(a) **Complete the diagram.** Place the correct letters for the bases in the boxes. [2]

(b) What is molecule **X**?

Draw a circle around the correct answer in the list below.

protein phosphate amino acid starch sugar [1]

(c) What term is used to describe the shape of a DNA molecule?

[1]

(d) Where is the DNA molecule found in the cell?


[1]

- 5 (a) DNA from different people has similarities but it also has differences that cause each person to be unique.

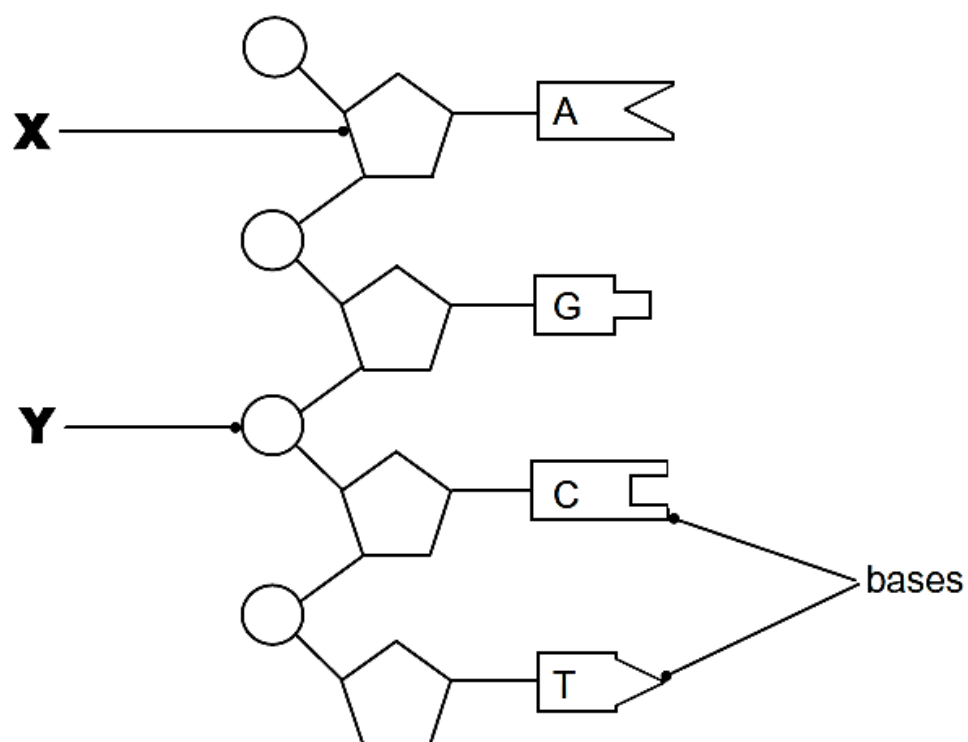
- (i) Describe the **similarities** in the structure of DNA molecules from different people.

A large, empty rectangular box with a thin black border, intended for the student to write their answer to question (i).

- (ii) Describe how DNA differs from one person to another making each of them unique.

A large, empty rectangular box with a thin black border, intended for the student to write their answer to question (ii).

The diagram shows part of a strand of DNA.



(a) Name the chemicals **X** and **Y**.

X

Y