I CAN describe the basic structure of the DNA molecule.

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

P. \_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_

Ch 6 S. 1a Genetics: Structure of DNA—CORNELL NOTES

A \_\_\_\_\_\_is a DNA sequence which gives instructions for cell processes

and for building cell structures.

DNA stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Deoxyribose is the type of sugar found in DNA, nucleic means that the DNA is found in the nucleus.

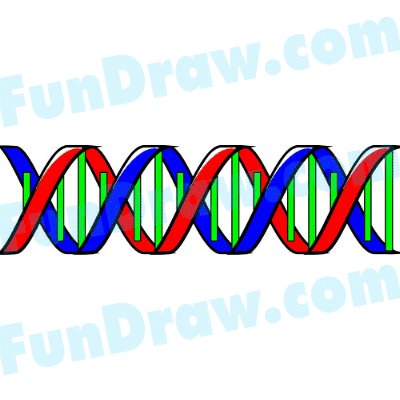
DNA is found in the nucleus, in a linear shape called a **\_\_\_\_\_\_\_\_\_\_\_\_**.

DRAW A PICTURE of a chromosome

DNA is composed of subunits called  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.

Each nucleotide is composed of a \_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_. DRAW A PICTURE.

Two strands of DNA bond together to form a twisted ladder or

[](http://www.fundraw.com/clipart/clip-art/00000805/Double-Hel#usebuy#use)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_, a shape that we recognize as DNA.

On the \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_the rails of the ladder are made from alternating sugar and phosphate; the rungs of the ladder are made from nucleotide base-pairs.

draw picture

The nucleotide bases on DNA are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

They always bond according to the **\_\_\_\_\_\_\_\_\_** - \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_: A-T and G-C.

draw picture

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

P. \_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_

Ch 6 S. 1a Genetics: History of DNA

James B. **\_\_\_\_\_\_\_\_\_**, Ph.D. (22 yrs.) traveled to London, England to study

the secret structure of DNA.

Francis **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**, (32 yrs.) wanted to discover the structure of DNA.

Crick was a loud talker.

Maurice **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** was using X-ray scatter to try and see DNA.

Rosalind \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ worked with Maurice.

Franklin used x-ray crystallography to construct the positions of the

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

She discovered that the sugar & phosphate are the backbone of DNA, and lies on

the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_of the molecule and the helical structure of DNA has

\_\_\_\_ strands. She was published but died before the Nobel Prize was given to Watson and Crick.

In \_\_\_\_\_\_ Watson and Crick figure out how the parts of DNA fit together.

Crick, Watson, & Wilkins shared the **\_\_\_\_\_\_\_\_\_** **\_\_\_\_\_\_\_\_\_\_\_\_** in 1963.

This discovery was the beginning of many new discoveries.