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



\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_, 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.