

**Unit 7 Worksheet**  
**Part I-DNA structure and Replication- pg**  
**185-189 Due in class on November 14<sup>th</sup>**

1. What does the word DNA stand for?

2. DNA is a **polymer**, which means that it is made many repeating single units (**monomers**). What are the monomers called?

3. There are 4 different variations of these monomers (4 different bases), what are those?

4. The base \_\_\_\_\_ pairs with \_\_\_\_\_. The base \_\_\_\_\_ Pairs with \_\_\_\_\_. This is called **complementary base pairs**. Thus one strand of the DNA is complementary to the other strand (opposite/matching).

5. Based on this base pairing system, which of the following is/are true?

- a. Cells contain the same amount of T as A
- b. Cells contain the same amount of C as G
- c. Cells contain the same amount of T as G
- d. Cells contain the same amount of A as C

6. One strand of DNA faces the opposite direction of the other stand. This is called \_\_\_\_\_ DNA is a double stranded molecule. It looks like a ladder with two sides. This double stranded molecule is coiled (rotated) in a helical manner (like a spring or a slinky, or a spiral staircase). Because of these two properties (2 strands which are coiled in a helical shape), DNA is said to be a \_\_\_\_\_

7. DNA is in the \_\_\_\_\_ of cells. DNA contains information to make \_\_\_\_\_ which are responsible for all activities in the cell. So the primary function of DNA is to store and transmit genetic information. The bases of DNA are linked together by intermolecular forces (forces between molecules) that are called \_\_\_\_\_. This is a

