**Chapter 12 DNA Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_ of DNA**

* **Deoxyribonucleic Acid**
  + **Complex \_\_\_\_\_\_\_\_\_\_\_\_ called a \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_**
  + **Serves as \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ of information code**
    - **\_\_\_\_\_\_\_\_\_\_\_\_\_ with each \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_**
    - **\_\_\_\_\_\_\_\_\_\_\_\_\_ from \_\_\_\_\_ generation to the \_\_\_\_\_\_**
  + **Composed of repeating \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
    - **Subunit of a \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_**

1. **Nucleotide Structure**

* **Three Parts:**
  + **\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
  + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ group**
  + **One of \_\_\_\_\_\_\_\_\_ nitrogen \_\_\_\_\_\_\_\_\_\_:**
    - **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (A)**
    - **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (T)**
    - **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (G)**
    - **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (C)**
* **A \_\_\_\_\_\_\_\_\_\_\_\_\_ joins with a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_:**
  + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ always joins with \_\_\_\_\_\_\_\_\_\_\_\_\_\_**
  + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ always joins with \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **Nucleotide Chains**

* **Nucleotides combine to \_\_\_\_\_\_\_\_\_\_ a \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_**
* **\_\_\_\_\_ chains joined together at the \_\_\_\_\_\_\_ by \_\_\_\_\_\_\_\_\_\_\_\_\_\_ bonds (looks like a \_\_\_\_\_\_\_\_\_\_\_)**
* **Ladder \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, giving a “\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_” shape**

1. **Importance of Sequence**

* **\_\_\_\_\_\_ DNA has similar \_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_**
* **\_\_\_\_\_\_ bases offer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of possible combinations =**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!!!**

1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of DNA**

* **DNA must be “\_\_\_\_\_\_” every time a \_\_\_\_\_ \_\_\_\_\_\_\_\_**
* **HOW?**
  + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_ breaks down the \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_ and “\_\_\_\_\_\_\_” the DNA**
  + **\_\_\_\_\_-\_\_\_\_\_\_\_\_ nucleotides join in to make \_\_\_\_\_\_ pairs**
  + **\_\_\_\_\_\_\_\_\_\_\_\_ reform \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_**