**Chapter 7&8 DNA and Protein Synthesis Notes**

1. **DNA Structure**
2. **Nucleotides have \_\_\_\_ parts:**
3. **A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
4. **A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
5. **A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
6. **\_\_\_\_\_ Nitrogenous bases**
7. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_)**
8. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_)**
9. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_)**
10. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_)**
11. **DNA Shape**
12. **Discovered by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
13. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – looks like a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
14. **Sides – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
15. **Rungs – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
16. **Base pairs**
17. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ always pairs with \_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_\_\_\_\_\_ )**
18. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ always pairs with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_\_\_\_\_\_ )**
19. **DNA Replication**
20. **Replication – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
21. **Process:**
22. **DNA unzips**
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
1. **Bases pair up**
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
1. **Sides bond**
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
1. **Protein synthesis –**
2. **The DNA strand is made of\_\_\_\_\_\_\_\_\_\_\_ – the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ make \_\_\_\_\_\_\_\_\_\_ – the \_\_\_\_\_\_\_\_\_\_ make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – these \_\_\_\_\_\_\_\_\_\_\_\_\_ are called \_\_\_\_\_\_\_\_\_\_\_\_.**
3. **Genes –**
4. **Involves 2 types of nucleic acids:**

**Differences between DNA and RNA**

|  |  |
| --- | --- |
| **DNA***
*
 | **RNA***
*
 |

1. **Involves 2 processes – Transcription and Translation**
2. **Transcription –**
* **Occurs:**
1. **Translation –**
* **Occurs:**
1. **Codon –**
2. **Anticodon –**
3. **“Start” codons –**
4. **“Stop” codons –**
5. **Sex chromosomes –**
6. **Females:**
7. **Males:**
8. **Who determines the gender of the offspring?**
9. **Autosomes –**

1. **Karyotype –**
2. **How are karyotypes made?**
3. **How are karyotypes read?**
4. **Genome –**

**A. What is The Human Genome Project?**

1. **Chromosomal Abnormalities**
2. **Nondisjuction –**
3. **Monosomy –**
4. **Trisomy –**
5. **Trisomy 21 –**
6. **XXX –**
7. **XXY –**
8. **X0 –**