**Nucleic Acids Guided Notes**

1. Nucleic acids are composed of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (CHONP). They are made up of monomers called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.



P= Phosphate group

S = a 5 carbon sugar (either ribose or deoyribose)

B = Nitrogen Base

2. There are two main functions of nucleic acids:

 (1) Store \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ information

 (2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ genetic information

3. There are two main types of nucleic acids:

(1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ acid (RNA)

(2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ acid (DNA)

4. RNA (ribonucleic acid) contains a different sugar group (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) than DNA. It has a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ strand of nucleotides that forms a single \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It functions to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ information from the DNA to the ribosomes. RNA carries a protein recipe to the ribosomes, structures in a cell that make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

5. DNA (deoxyribose nucleic acid) contains the sugar \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It has \_\_\_\_\_\_ chains of nucleotides held together by bonds. It forms a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ helix structure. DNA functions to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hereditary information. It also provides recipes for the proteins that are made, and is found in the cell’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

6. Comparison of DNA vs RNA:

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| --- | --- |
| **DNA** | **RNA** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Stranded | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Stranded |
| Sugar: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Sugar: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Includes Nitrogen Bases: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Includes Nitrogen Bases: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
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