Molecular Genetics Introduction

**KEY TERMS & CONCEPTS:**

* **DNA** is a chemical \_\_\_\_\_\_\_\_\_\_\_\_ made of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a DNA molecule are instructions for making \_\_\_\_\_\_\_\_\_\_\_\_\_.
* A **gene** is a piece of \_\_\_\_\_\_ instructions for making 1 \_\_\_\_\_\_\_\_\_\_\_\_\_.

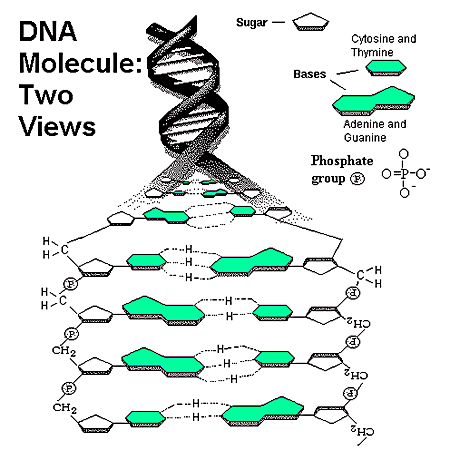
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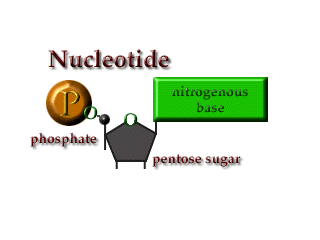
In a code, a \_\_\_\_ is 1 single piece of information. In language, these are \_\_\_\_\_\_\_\_\_\_\_. In DNA, these are \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Program: “a planned, coordinated group of activities, procedures, etc., often for a specific purpose.“

DNA is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ code for \_\_\_\_\_\_\_\_.

How many DNA bases are there? \_\_\_\_\_\_\_ What are they (use letter abbreviations) \_\_\_, \_\_\_, \_\_\_, \_\_\_





COMPLIMENTARY BASE PAIRING

* The 2 strands of a DNA molecule are held together by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between nucleotides
* Because they have different shapes, \_\_\_ and \_\_\_\_ stick together, as do \_\_\_\_ and \_\_\_\_.
* \_\_\_\_ is always across from \_\_\_\_ and \_\_\_\_ is always across from \_\_\_\_ in a DNA molecule.

Practice:

One strand sequence is A T C G G C T A T A

Opposite strand is \_\_\_, \_\_\_, \_\_\_, \_\_\_, \_\_\_, \_\_\_, \_\_\_, \_\_\_, \_\_\_, \_\_\_\_

4 Big reasons to study DNA

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_