

## DNA: STRUCTURE AND REPLICATION (Filmstrip)

### Structure of DNA

1. DNA stands for \_\_\_\_\_
2. DNA is an unusual molecule in that it:
  - a) \_\_\_\_\_
  - b) \_\_\_\_\_
3. DNA is the primary material found in \_\_\_\_\_ (evidence suggests that a chromosome is a single coiled molecule of DNA)
4. Humans possess (in their body/somatic cells) \_\_\_\_\_ chromosomes. We inherit \_\_\_\_\_ chromosomes from our mother and \_\_\_\_\_ from our father.
5. In eukaryotic cells, DNA molecules (chromosomes) are found in the \_\_\_\_\_.
6. The 3-dimensional structure of DNA was discovered by \_\_\_\_\_ and \_\_\_\_\_.
7. The shape of the DNA molecule is best described as a \_\_\_\_\_ with \_\_\_\_\_ bonded to the \_\_\_\_\_.
8. The building blocks of DNA are units called \_\_\_\_\_. A nucleotide consists of 3 parts:
  - a) \_\_\_\_\_
  - b) \_\_\_\_\_
  - c) \_\_\_\_\_
9. Sketch and label a nucleotide below: