

MIT DNA/RNA Set Class Notes

Name _____

Date _____

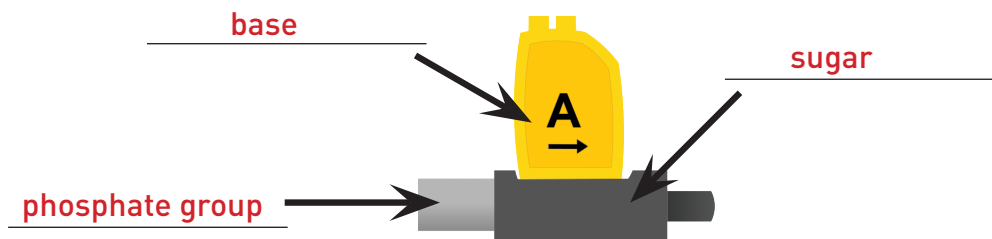
Class _____

To be completed in class using DNA/RNA Booklet 1 (pages 3-13).

1. What are the subunits of DNA called? nucleotides
They are small molecules.

2. Where are these subunits found in the cell? in the nucleus

3. Here is a model of a nucleotide. Label the 3 parts of the molecule.

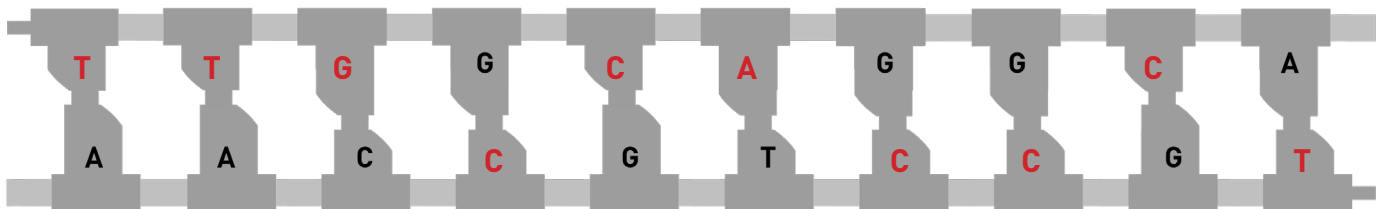


4. The letter A on the nucleotide above is an abbreviation for its chemical name.
Write out the 4 chemical names for the DNA bases. (Order of nucleotide names does not matter.)

adenine cytosine guanine thymine

5. Write in the correct letters to complete the DNA base pairs below.

How many total nucleotides are represented in this diagram? 20



6. If the DNA shown above is replicated, will the 2 DNA molecules be identical? Circle YES or NO

7. Describe how DNA replication works.

During replication, the DNA double strand opens up down the middle. Each original strand base
pairs with individual nucleotides to create a new strand. The 2 DNA molecules created will each
have 1 original strand and 1 new strand. This is called semiconservative replication.