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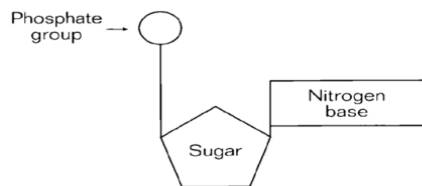
### DNA and RNA Quiz

1) Molecules of DNA are composed of long chains of

- a. amino acids.
- b. monosaccharides.
- c. fatty acids.
- d. nucleotides.

2) Which of the following is not part of a molecule of DNA?

- a. deoxyribose
- b. nitrogen base
- c. phosphate
- d. ribose



3) During DNA replication, a complementary strand of DNA is made for each original DNA strand. Thus, if a portion of the original strand is CCTAGCT, then the new strand will be

- a. TTGCATG.
- b. CCTAGCT.
- c. AAGTATC.
- d. GGATCGA.

4) In RNA molecules, adenine is complementary to

- a. cytosine.
- b. guanine.
- c. thymine.
- d. uracil.

5) During transcription, the genetic information for making a protein is "rewritten" as a molecule of

- a. messenger RNA.
- b. transfer RNA.
- c. ribosomal RNA.
- d. translation RNA.

6) During translation,

- a. proteins are synthesized.
- b. RNA is produced.
- c. DNA is replicated.
- d. transcription occurs.

7) Each nucleotide triplet in mRNA that specifies a particular amino acid is called a(n)

- a. mutagen.
- b. codon.
- c. anticodon.
- d. intron.

8) Each of the following is a type of RNA except

- a. carrier RNA.
- b. ribosomal RNA.
- c. messenger RNA.
- d. transfer RNA.

9) Because DNA replication is semi-conservative, it results in two DNA molecules,

- a. each with two new strands.
- b. one with two new strands and the other with two original strands.
- c. each with one new strand and one original strand.
- d. each with two original strands.

10) In eukaryotes, DNA

- a. is located in the nucleus.
- b. is located in the ribosomes.
- c. floats freely in the cytoplasm.
- d. is circular.

11) Segments of DNA, called genes, contain instructions for assembling

- a. pyrimidines.
- b. proteins.
- c. nucleosomes.
- d. purines.

**12) The triplet code of bases for RNA may be represented by all of the following except--**

- a. CGA
- b. CGG
- c. CGT
- d. CGU