

Active Reading

Section: The Structure of DNA

Read the passage below. Then answer the questions that follow.

Watson and Crick determined that DNA is a molecule that is a **double helix**—two strands twisted around each other, like a winding staircase. Each strand is made of linked nucleotides. **Nucleotides** are the subunits that make up DNA. Each nucleotide is made of three parts: a phosphate group, a five-carbon sugar molecule, and a nitrogen base. The five-carbon sugar in DNA nucleotides is called **deoxyribose**, from which DNA gets its full name, deoxyribonucleic acid.

SKILL: READING EFFECTIVELY

Read each question, and write your answer in the space provided.

1. What does the key term *double helix* mean?
2. What is the purpose of the phrase “like a winding staircase” in the first sentence?
3. Name another object that provides a visual model of a double helix.
4. In many words, the prefix *sub-* means “forming part of a whole.” For example, a subset is part of a set. Why then, are nucleotides called subunits of DNA?
5. What are the three subunits that make up a nucleotide?

Active Reading *continued*

6. What do the letters *DNA* stand for?

An analogy is a comparison. In the space provided, write the letter of the term or phrase that best completes the analogy.

_____ 7. DNA is to nucleotide as nucleotide is to

- a. deoxyribose.
- b. double helix.
- c. nucleic acid.
- d. Both (a) and (b)