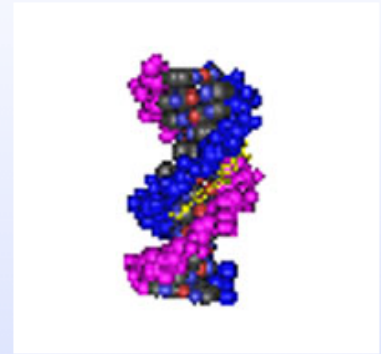


The image on the right shows a drug (yellow) binding to DNA. To what region of DNA is the drug binding?



- A. The major groove
- B. The minor groove
- C. Neither

Which of the following elements is NOT found in DNA?

- A. nitrogen
- B. phosphorus
- C. carbon
- D. sulfur
- E. oxygen

Nucleotides are composed of:

- A. protein, sugar, and lipids
- B. DNA
- C. RNA and amino acids
- D. phosphate, sugar, and a base
- E. carbohydrates and nucleic acids

How are nucleotides joined together in a single strand of DNA?

- A. through hydrogen bonds
- B. through carbon-carbon bonds
- C. by complementary base pairing
- D. through peptide bonds
- E. through phosphodiester bonds

Which DNA sequence is both complementary to the sequence shown in red and has the correct labels at each end?

5' GGCCTAGTAA 3'

- A. 3' AGCTAGGAT 5'
- B. 3' CCGGATCATT 5'
- C. 5' CTAGCTTCG 3'
- D. 3' TCGATCCTA 5'

How many hydrogen bonds would be formed, between two complementary DNA strands, if they have the same sequence shown in question 5?

- A. 10
- B. 35
- C. 20
- D. 25
- E. 18

DNA test p.3

The last set of questions are related to the image [at this link \(click here\)](#). The letters and shaded areas indicate specific chemical groups, atoms, or bonds. Select the letter that corresponds to the best choice for each of the items below.

A covalent bond

- A B C D E F G H

A 3' carbon

- A B C D E F G H

A deoxyribose

- A B C D E F G H

An adenine

- A B C D E F G H

A cytosine

- A B C D E F G H

A non-covalent bond

- A B C D E F G H

A phosphodiester bond

- A B C D E F G H

A 5' carbon

- A B C D E F G H

