

2. DNA was extracted from cells of *Staphylococcus a fermentans* and analyzed for base composition. It was found that 37 percent of the bases are cytosine. With this information, is it possible to predict what percentage of the bases are adenine? If so, what percentage? If not, why not?

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3. If one strand of DNA in the Watson-Crick double helix has a base sequence of:

‘5 – GTCATGAC – 3’,

what is the base sequence of the complementary strand? How do you know?

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4. How do Chargaff’s rules of nucleotide base pairing apply to the structure of DNA described by Watson and Crick?

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