

6 Nucleic acids – Part 2 —Answers

Answers

Work through these after trying the questions yourself.

6.1 Any two of: RNA is a single strand (DNA is double); RNA's sugar is ribose (DNA's is deoxyribose); RNA uses uracil instead of thymine.

6.2 Three bases.

6.3 (a) transcription \ (b) translation.

6.4 It brings an amino acid; its anticodon pairs with the codon on the mRNA.

6.5 A substitution changes only the one triplet it falls in. A deletion shifts the reading frame, so every triplet after it is read differently (a frameshift), changing many amino acids.

6.6 A change in the base sequence of a DNA molecule.

6.7 A–U–G. Each RNA base pairs with the template: T→A, A→U, C→G —so T–A–C is transcribed as A–U–G.