

Nucleic acids and inheritance

1. The bonding between complementary base pairs is:
 - Van der Waal's forces
 - Ester links
 - Peptide links
 - Hydrogen bonding
2. The following base pairs can produce complementary base pairing:
 - A - G
 - T - C
 - A - T
 - T - U
3. The type of reaction that forms the sugar-phosphate chains in DNA and RNA is:
 - substitution
 - condensation polymerisation
 - esterification
 - addition polymerisation
4. The sugar present in the nucleotides of DNA is:
 - Deoxyribose
 - Ribose
 - Glucose
 - Fructose
5. Which of the following are pyrimidine bases?
 - cytosine and adenine
 - cytosine and guanine
 - adenine and thymine
 - cytosine and thymine
6. Which of the following are purine bases?
 - adenine and cytosine
 - adenine and uracil
 - adenine and guanine
 - adenine and thymine
7. The four bases in RNA are:
 - adenine, guanine, thymine, uracil
 - adenine, cytosine, thymine, uracil
 - adenine, guanine, cytosine, uracil
 - adenine, guanine, cytosine, thymine
8. The sugars in nucleotides are:
 - trioses
 - pentoses
 - hexoses
 - heptoses
9. Intramolecular bonds in nucleotides are formed by:
 - condensation reactions
 - polymerisation reactions
 - esterification reactions
 - hydrolysis reactions
10. The three components of nucleotides are:
 - a sugar, a phosphate group, a nitrogen-containing base
 - a sugar, a phosphate group, an amino acid
 - glucose, a phosphate group, a nitrogen-containing organic base
 - glucose, a phosphate group, an ester