

Review for Chapter 8 and 9 Test

The main difference between the four nucleotides that make up DNA is that they have different

1. Sugars
2. Uracil
3. Bonds
4. bases

In all organisms, the coded instructions for specifying the characteristics of the organism are directly determined by the arrangement of the

1. Twenty kinds of amino acids in each protein
2. Twenty-three pairs of genes on each chromosome
3. Strands of simple sugars in certain carbohydrate molecules
4. Four types of molecular bases in the genes

Which of the following experimental techniques involves treating a genetic disorder by replacing a defective gene with a functional gene?

1. Genetic screening
2. Bioinformatics
3. Genomics
4. Gene therapy

A sudden change in the DNA of a chromosome can usually be passed on to future generations if the change occurs in a

1. Skin cell
2. Liver cell
3. Sex cell
4. Brain cell

The weakest bonds in a double-stranded molecule of deoxyribonucleic acid exist between the

1. Deoxyribose sugars
2. Nitrogenous bases
3. Phosphate groups
4. 5-carbon sugars

Answer the following questions

- Chapter 8 (p.260) - #**23**, 24, **26**, 27, **28**, 30, **31**, **32**, **33**
- Chapter 9 (p.290) - #**27**, 28, **29**, **30**