

DNA Practice

Name Key

1. What is the name of the Molecule that is responsible for running all of the processes in the cell?

DNA (Deoxyribonucleic Acid)

2. What are the individual subunits of a nucleic acid called?

nucleotide

3. What are the three parts of a nucleotide?

phosphate group - 5 carbon sugar - nitrogen base



4. What are the four types of nitrogenous bases?

A, T, G, C

5. What is the name of the sugar in DNA nucleotides?

Deoxyribose

6. What is the name of the bond that holds the separate nucleotides together?

Hydrogen bonds

7. Which nitrogen base pairs up with Adenine? T

8. Which nitrogen base pairs up with Guanine? C

9. Make the complementary strand of DNA for the following sequence of DNA –

A T A A G G C A T A A T G A C C T A G  
T A T T C C G T A T T A C T G G A T C

10. What is the shape of DNA? Double helix

11. How does DNA replicate?

Occurs in the S-phase of Interphase.

1. DNA strands unzip
2. Free nucleotides base pair to make new strands
3. Get 2 identical molecules of DNA

Unit 6 DNA VIDEO QUESTIONS

1. Where is the DNA located in the cell?

nucleus (eu) (Pro in cytoplasm)

2. Chromatin forms what?

Chromosomes

3. Is DNA large or small?

4. How many strands make up DNA?

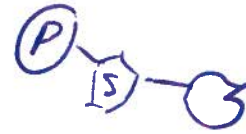
2

5. What is the subunit of DNA?

nucleotide

6. What are the three parts of a DNA subunit?

Phosphate-sugar-nitrogen Base



7. What makes up the backbone of the DNA molecule?

Phos

8. What are the four chemical (Nitrogen) bases?

A, Adenine, T Thymine, C, Cytosine, G, Guanine

9. How do the bases pair?

A-T G-C

10. What are genes made of?

segments of DNA

11. Genes hold instructions for making what?

Proteins

12. What are proteins made of?

amino acids

13. How many amino acids are there?

20

14. How many nucleotides/bases are used to make a genetic code/codon?

3 (example = CCG = 1 codon)

15. Why is DNA replication important?

so each cell has a set of instructions