

DNA REVIEW 2017

Name _____

Topic: DNA structure and function (replication, transcription and translation)

Make sure you understand the basic structure of DNA and who helped contribute to the model of DNA. You will also be tested on how DNA contributes to our traits (codes for proteins).

Practice Problems:

1. What is the building block of DNA? What are the 3 things that form the building block?
2. Which of the following nitrogen bases of DNA below are matched up correctly?
 - a. Adenine-Guanine (A-G)
 - b. Thymine- Cytosine (T- C)
 - c. Guanine-Guanine (G-G)
 - d. Cytosine- Guanine (C-G)
3. If the following strand of DNA reads **ATCTAGCCA**, what would the complimentary strand read?
4. What is DNA replication? Why is it important?
5. Your DNA is 99.9% identical to your peers. What do you know about DNA that can explain why you do not look anything like your peers?
6. List three differences between DNA and RNA: (page 212)
7. During which process is mRNA produced?
8. Which process uses mRNA and tRNA to make a protein?

9. Transcription happens in the _____ of the cell and translation happens in the _____ of the cell.

10. Amino acids build _____.

11. What does mRNA do? What does tRNA do?