Review for upcoming Exam (Scientists (see your notes); DNA and RNA structure and protein synthesis (Chapter 10 + worksheets), gene expression (answers to questions) and mutations(handout).

See Chapters 10 (Scientists Handouts too!) , 11 (handout questions), and pages 239-240 and the reading: GENETIC MUTATIONS).

Chapter 10.

1. Explain the contributions that Griffith, Avery, Hershey-Chase, Watson and Crick and Wilkins and Franklin made to understanding the structure and function of DNA. In 1-2 sentencesfor each, describe the contribution and key aspects of the experiment. What came first, second, etc.

2. What is the difference between a chromosome and a gene?

3. Does a gene participate directly in protein synthesis? Explain your answer.

4. You have a strand of nucleic acid that contains a deoxyribose sugar and is single stranded. In all likelihood, what type of nucleic acid is represented?

5. What are two key differences between replication and transcription?

6. What is another name for protein synthesis?

7. Differentiate between DNA and RNA

8. Differentiate between the three types of RNA.

9. During transcription, RNA polymerase "reads" one strand of the DNA. Which strand? In what direction is RNA read?