Textbook Assignment

Textbook Page 305-310

Take Notes in your notebook along with answering the questions on the sheet given in class.

Things to know and focus on:

\*\* Explain why researchers originally though protein was the genetic material

\*\*\*3 major experiments helped show that a nucleic acid carried cell information – Explain the experiment and contributions of

1. Frederick Griffith
2. Avery-MacLeod and McCarty
3. Hershey and Chase
4. Erwin Chargaff

\*\*Many Scientists contributed to determining the structure of DNA – Explain the contributions of each scientist

1. Rosalind Franklin
2. James Watson and Francis Crick
3. Meselson and Stahl

\*\*Describe the structure of DNA, what it is made of, bonds, purines, pyrimidines, phosphates, sugars, nitrogen bases

\*\* Explain the base-pairing rule and describe its significance

Open Book Quiz Tomorrow

Textbook Assignment

Monday 2/29

Textbook Page 311-319

Take Notes in your notebook along with answering the questions on the sheet given in class.

Things to know and focus on:

\*\* What are the two chemical components of chromosomes

\*\*Relate: replication and cell division

\*\* 3 main steps to replication

\*\* Define Antiparallel and explain why continuous synthesis of both DNA strands is not poosble

\*\* Describe the process of DNA replication, including the role of the origins of replication and replication forks/Direction of replication

\*\* The result of replication

\*\*Describe the Semi-conservative model of replication

\*\* Describe the significance of Okazaki fragments

Poster Assignment

Textbook Page 311-319

\*\*Distinguish between the leading strand and the lagging strand

\*\*Explain how the lagging strand is synthesized even though DNA polymerase can add nucleotides only to the 3’ end.

\*\*Explain the roles of DNA ligase, primer, primase, helicase topoisomerase, and single strand binging proteins

\*\*Explain the roles of DNA polymerase mismatch repair enzymes, and nuclease in DNA proofreading and repair

\*\*Describe the structure and function of telomeres

\*\*Explain the possible significance of telomerase in germ cells and cancerous cells