***Name:***

***Study guide- remember this is not everything. This is to get you thinking.***

***1. What are purines & pyrimidines and give all the examples of each?***

***2. Which scientists determined the structure of DNA?***

***3. DNA and RNA are named by their \_\_\_\_\_\_\_\_\_\_.***

***4. What three things make up a nucleotide?***

***5. Describe the structure of DNA.***

***6. An organism's characteristics are coded for by molecules of \_\_\_\_\_\_\_\_\_\_.***

***7. What are the subunits called that make up DNA?***

***8. Sketch and label the basic structure of a nucleotide.***

***9. What 2 things are found on RNA, but are not found on DNA molecules?***

***10. What is the primary function of DNA?***

***11. What did Rosalind Franklin's x-ray photographs of DNA crystals tell us about this molecule?***

***12. State Chargaff's rule.***

***13. What happens to tRNA anticodons during translation?***

***14. What is a codon & where are they found?***

***15. What is the function of rRNA?***

***16. What bases pair with each other on: a) DNA?   b) RNA?***

***17. Name the 3 types of RNA & tell the function of each.***

***18. What is the function of DNA polymerase?***

***19. If the code on DNA is TTAGCCTGA, what will be the code on the complementary section of DNA when it's copied during replication?***

***20. List all the ways that RNA differs from DNA?***

***21. Where does mRNA go for proteins to be made in a cell?***

***22. What is transcription?***

***23. What is translation?***

***24. Which RNA carries instructions for making proteins?***

***25. What is the function of DNA helicases?***

***26. What is the job of restriction enzymes?***