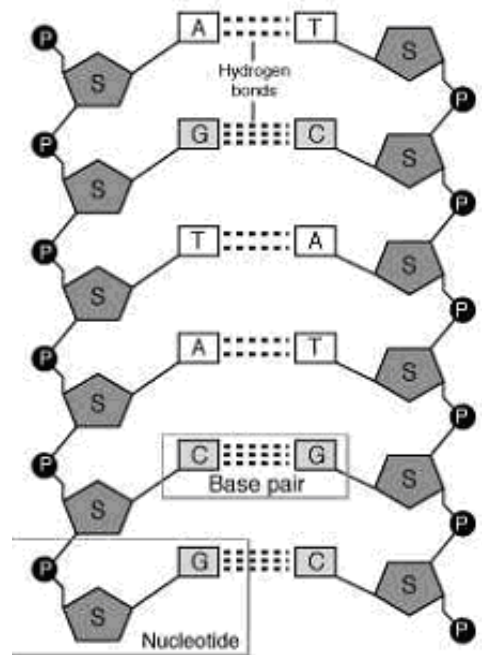


Name _____ Period: _____ Date: _____

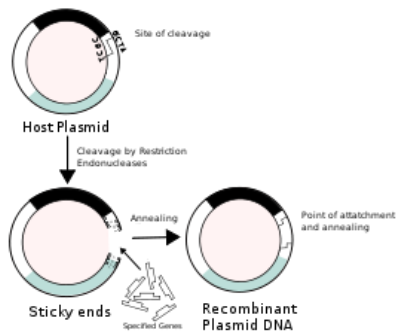
Chemicals of Life WS III

NUCLEIC ACIDS

1. Describe the structure and shape of DNA.
2. What are the rails of the ladder made of?
 - a. _____
 - b. _____
3. How are the rungs of the ladder kept together?
4. What are the four different DNA bases?
 - a. _____
 - b. _____
 - c. _____
 - d. _____
5. Adenine or base 'A' always pairs with what base?
6. List three differences between DNA and RNA.
 - a. _____
 - b. _____
 - c. _____
7. What is the difference between transcription and translation?



8. How does gel electrophoresis work?



9. Why would a scientist create recombinant DNA?

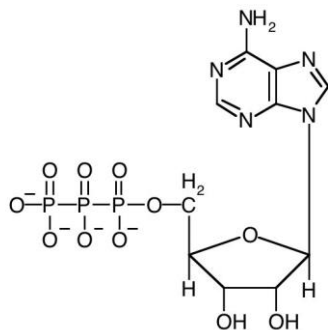
10. What types of proteins are made with gene cloning?

11. Name two types of Vitamins and whether they are lipid or water soluble

a. _____

b. _____

12. What is the difference between a vitamin and a mineral?



13. What is the name of this molecule and what is its role in your body?

14. What four biomolecules are produced with anabolism?

- a. _____
- b. _____
- c. _____
- d. _____

15. If you wanted to increase muscle mass, what would you have to do nutrition-wise?

16. Why is it important to eat more insoluble fiber? Soluble fiber?

17. Which type of fat would increase your LDL and lower your HDL and therefore increase your risk of heart disease?

18. Why should we be concerned about what protein we eat?

19. If a person were vegetarian, which protein combination would help them get all 8 essential amino acids?

20. Which topic was the most valuable to you from this chapter?