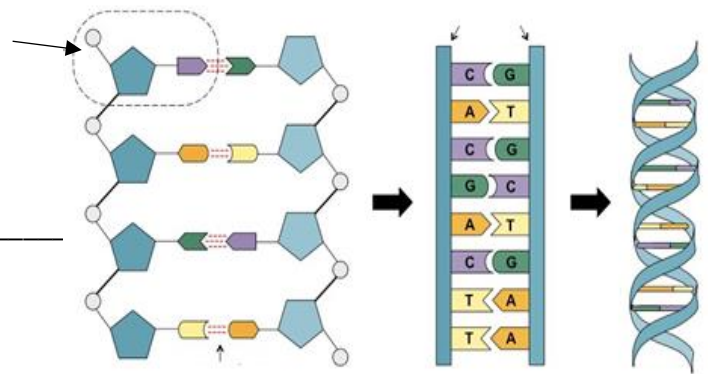


DNA Review Worksheet

Name: _____

1. What does DNA stand for? _____
2. Where in a cell is DNA found? _____
3. What is the difference between chromatin and chromosomes?
4. How many PAIRS of chromosomes does a human have in their skin cells? _____
5. A segment of DNA that codes for a protein is called a _____.
6. What are the three parts of a DNA molecule? Label the three parts of a DNA molecule in the picture provided.

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



7. What 4 bases make up DNA molecules? _____
 - a. What is the base pairing rule?
 - b. What scientist(s) is credited with this rule?
8. Scientifically, describe the shape of a DNA molecule. _____
9. What type of bond holds together the nitrogen bases? _____
 - a. How many hydrogen bonds are found between A-T? _____ C-G? _____
10. What are purines? What are pyrimidines?

11. Write the complementary stand to this DNA molecule on the line.

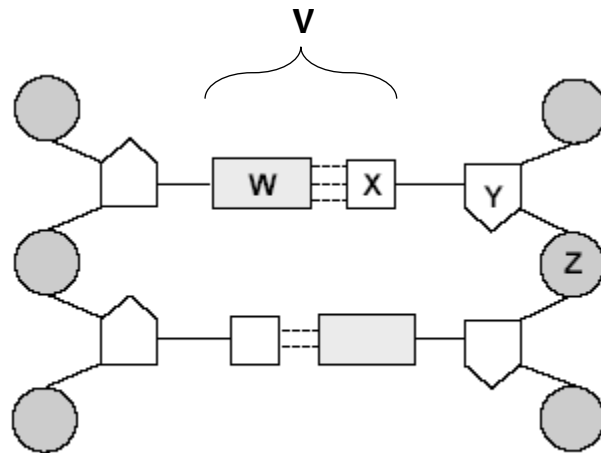
G A T C C A T G A G T T A C

12. If 27% of the bases in a segment of DNA are adenine, then what would be the percentages of the other 3 nitrogen bases?
13. What is the importance of the order of base pairs in a DNA molecule? (Hint: what might happen if the order of the base pairs were changed?)

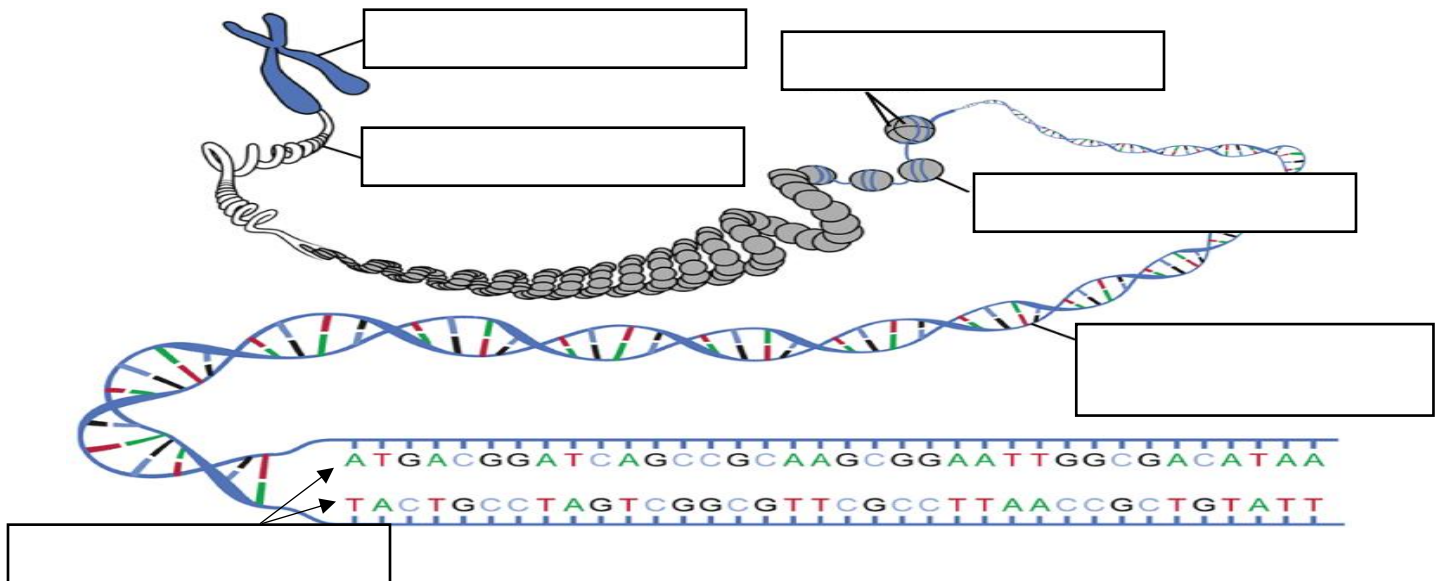
14. When does DNA replicate? _____

a. During DNA replication, what causes the hydrogen bonds to break? _____

15. Label the DNA structure diagram below. Indicate which side is $3' \rightarrow 5'$ and $5' \rightarrow 3'$. Label V – Z



16. Label the DNA organization diagram below.



17. The section of DNA that makes up our characteristics (eye color, hair color, etc) is a _____

18. The order of nitrogen bases (A,T,C,G) determines the type of _____ that is assembled.

a. How are they made? What are the steps?