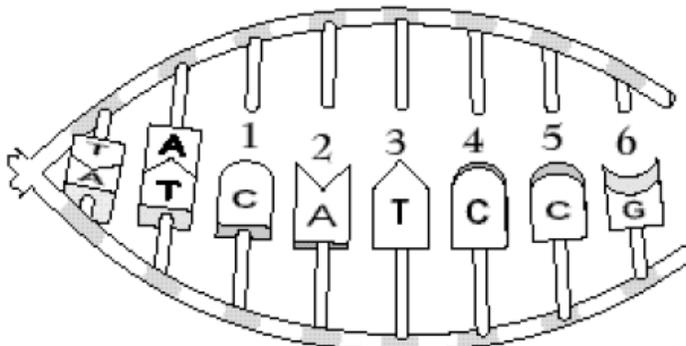


Name: _____ Date: _____ Period: _____

DNA Quiz

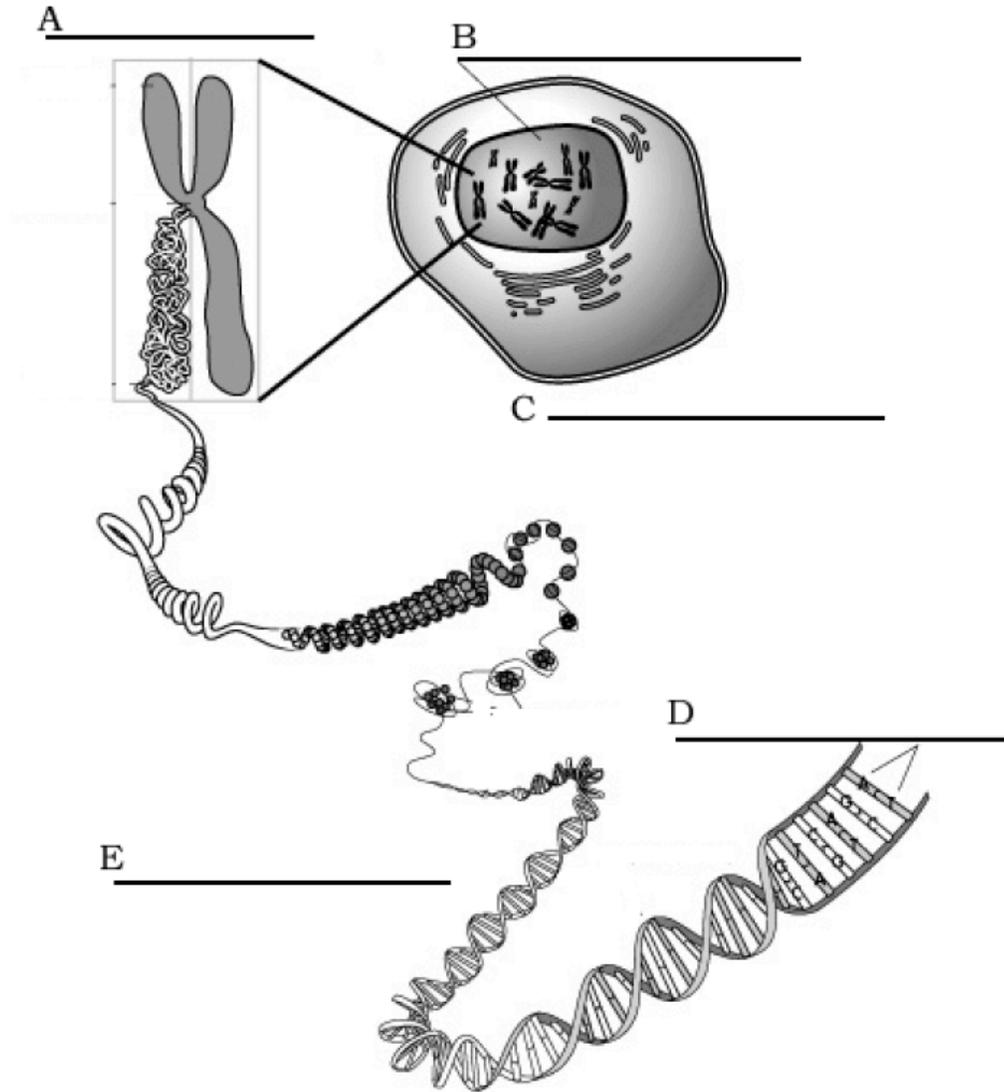
DNA STRUCTURE

1. Completely spell out the name of the material that determines inherited characteristics.
2. What two things are chromosomes made of?
3. What is DNA made of? What three things are they made up of?
4. Name the four nitrogenous bases. Which pair together?
5. Name what the structure of DNA is called.
6. Why are there two strands of DNA?
7. What are the sides of DNA made of? What are the rungs of DNA made of?
8. Why does DNA condense into chromosomes?
9. When does DNA decondense?
10. Fill in the chart below.



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

11. Fill in the DNA structure below.



DNA REPLICATION

12. When does DNA replicate?

13. Why does DNA replicate?

14. How does DNA replicate?

Proteins

15. A _____ is 3 nucleotides coding for _____ amino acid/s

16. What makes a protein?

17. Generally, explain how a protein is made.

18. What is the function of the ribosomes in the making of proteins?

MUTATIONS

19. What mutation is shown below?

Original sequence



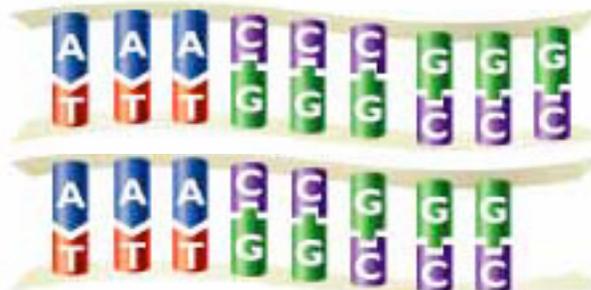
20. What mutation is shown below?

Original sequence



21. What mutation is shown below?

Original sequence



22. What is a mutagen? Give an example.

23. Are all mutations harmful?

CONTRIBUTIONS TO THE DNA MODEL

24. What did Chargaff do and what is it called?

25. What did Franklin do?

26. What did Watson and Crick do?

USES OF GENETIC KNOWLEDGE

27. What manipulates genes within organisms and give an example?

28. What is DNA fingerprinting?

DNA EXTRACTION LAB

29. What would happen if you didn't add meat tenderizer during the extraction lab?

30. What type of thing would you use as a source of DNA for this experiment?

31. What type of thing wouldn't you use as a source of DNA for this experiment?

32. What does the detergent do in the extraction lab?