

Biology

Name: _____

Questions over DNA Crash Course video

Date: _____ Hour: _____

Video can be found at: <https://www.youtube.com/watch?v=8kK2zwjRV0M>

1. How many years ago did we finally find out what DNA looked like?

2. If laid end to end, how many times would your DNA stretch to the Sun?

3. How many letters are found in the DNA code?

4. How many chromosomes are found in your body, somatic, cells?

5. What is a polymer?

6. What three parts make up each nucleotide?

7. What two parts combine together to form the twin backbones of DNA? _____

8. What does 5' and 3' mean?

9. According to the video, adenine must pair with _____ and guanine must pair with _____.

10. How many base pairs are in chromosome 1?

11. What is similar between RNA and DNA?

12. What are the three differences between RNA and DNA? _____

13. Who actually discovered DNA in 1869?

14. How did he collect the cells he used?

15. What did Rosalind Franklin discover?

16. How long does it take, approximately, to create a copy of all your DNA? _____

17. What is replication?

18. What is the purpose of DNA helicase?

19. What is a replication fork?

20. Which is easier to replicate - the leading strand or the lagging strand? _____

21. What is the purpose of DNA polymerase?

22. What is a primer?

23. What direction is the only way that DNA polymerase can copy strands? _____

24. How long are most Okazaki fragments?

25. What is the purpose of DNA ligase?

26. How can your DNA be proofread for errors?

27. How often do mistakes actually occur?

28. What is the “most celebrated molecule of all time”?
