

Name _____ Date _____

"Bill Nye: Genes" Video Worksheet -- ANSWERS

1. Where do your genes come from?
2. What is inside every cell in your body?
3. What does DNA stand for?
4. What did Bill climb to get out of the Nye Lab?
5. How long is the DNA string model of science?
6. How many times longer is DNA than it is wide?
7. How does Bill define a Gene?
8. Why is the white blood cell dark on the computer screen?
9. What can you do with DNA after you take it out of an organism?
 - a.
 - b.
10. What 2 organisms were combined to create the message to Bill in the petri dish?
11. What do genes do?
12. Mom tells Richie: Genes are the set of _____ that get passed down from _____ to child. In the process, of course, the genetic material is recombined in new ways, which is why some people bear resemblance to their _____ and _____ without looking like any one relative in particular.
13. What analogy does Bill use to describe the human set of chromosomes?
14. What is each chapter analogous to?
15. How many genes to humans have?
16. What do cells in the body not need to do?

Name _____ Date _____

17. Most species have fewer than _____ chromosomes but thousands and thousands of genes

18. Bill calls the babies "bundles of _____"

19. The reproductive cell that a mother donates to her child is called the _____

20. The reproductive cell that a father donates to his child is called the _____.

21. The number of cells needed to make a baby is: _____

22. DNA is the _____ print for the future

23. Earlobes can be _____ or _____

24. A _____ is a piece of the _____ molecule

25. The four chemicals of DNA are

1. **a** _____

2. **t** _____

3. **c** _____

4. **g** _____

26. The number of chromosomes that a mule foal has is _____.

27. The number of chromosomes that a horse has is _____.

28. The number of chromosomes that a donkey has is _____.

29. In the demonstration, the _____ gene for rolling your tongue is represented by the letter "R"

30. In the demonstration, the _____ gene for rolling your tongue is represented by the letter "r"

31. If a person has the pattern RR, then the person _____ roll their tongue

32. If a person has the pattern Rr, then the person _____ roll their tongue

33. If a person has the pattern rr, then the person _____ roll their tongue

34. What is special about the turtle in this movie? _____.