

Name _____ Date _____

"Bill Nye: Genes" Video Worksheet (Do a search on YouTube if the link is bad)

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 does the nucleus of the cell contain?
10. What can you do with DNA after you take it out of an organism?
 - a.
 - b.
11. What 2 organisms were combined to create the message to Bill in the petri dish?
12. What do genes do?
13. Mom tells Richie: Genes are the set of _____
_____ that get passed down from _____ to child. In the process, of course, the genetic material is _____ in new ways, which is why people bear resemblance to their _____ and _____ without looking like any one relative in particular.
14. What analogy does Bill use to describe the human set of chromosomes?
15. What is each chapter analogous to?
16. How many genes to humans have?

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17. What do cells in the body not need to do? _____

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

19. Bill calls the babies "bundles of _____"

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

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

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

23. DNA is the _____ print for the future

24. Earlobes can be _____ or _____

25. A _____ is a piece of the _____ molecule

26. The four chemicals of DNA are

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

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

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

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

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

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

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

35. What is special about the turtle in this movie?