

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Bill Nye - Genes

1. \_\_\_\_\_, otherwise known as deoxyribonucleic acid, is shaped like a \_\_\_\_\_ that's been \_\_\_\_\_.
2. DNA is made up how many chemicals? \_\_\_\_\_
3. DNA is this many times longer than it is wide? \_\_\_\_\_
4. DNA is made up of thousands of tiny sections called \_\_\_\_\_
5. Thousands of genes join together to make \_\_\_\_\_
6. Do red blood cells have a nucleus? \_\_\_\_\_
7. Humans have \_\_\_\_\_ pairs of chromosomes, for a total of \_\_\_\_\_ chromosomes.
8. Chromosomes are to \_\_\_\_\_ as genes are to \_\_\_\_\_.
9. Approximately how many genes does your DNA contain? \_\_\_\_\_
10. Does each cell need to read every chapter? \_\_\_\_\_
11. How many chromosomes do you get from your dad? \_\_\_\_\_ Your mom? \_\_\_\_\_
12. How many combinations can your genes combine into? \_\_\_\_\_
13. The four chemicals found in DNA are:
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
14. If we printed out all the human genes, how many sheets of computer paper would it take?  
\_\_\_\_\_
15. A mule is a cross between a female \_\_\_\_\_ and a male \_\_\_\_\_.