

NAME:

PERIOD:

DATE:

## GENETICS HOMEWORK #1

Answer the following questions. You may use your notes to assist you.

### PART ONE: Multiple Choice. **WRITE THE LETTER IN THE BLANK!**

1. \_\_\_\_\_ A characteristic of an organism that is based on information stored in its DNA.  
A. gene                      B. allele                      C. dominant                      D. trait
2. \_\_\_\_\_ This type of allele can't "show up" (as a phenotype) unless two of them are together.  
L. gene                      M. homozygous                      N. recessive                      O. dominant
3. \_\_\_\_\_ If Brown eyes is dominant (B) and blue is recessive (b) and Buford has blue eyes what is his genotype?  
A. bb                      B. Bb                      C. BB                      D. Both B and C are correct
4. \_\_\_\_\_ A piece of DNA that contains the code for one trait is called a...  
G. allele                      H. trait                      I. gene                      J. dominant
5. \_\_\_\_\_ If red flowers (R) are incompletely dominant with blue flowers (B) then what color will a flower with genotype RB turn out as?  
R. red                      S. purple                      T. blue                      U. colorless
6. \_\_\_\_\_ A trait with more than two alleles is...  
A. recessive                      B. a multiple allele trait                      C. a gene                      D. incompletely dominant
7. \_\_\_\_\_ Red flower is (R) and green flower is (g.) What is the chance that parents who are Rg and Rg will have green kids?  
O. 25%                      P. 50%                      Q. 75%                      R. 0%
8. \_\_\_\_\_ Which of the following is a genotype?  
N. blue eyes                      O. Hh                      P. red flower                      R. Both N & P
9. \_\_\_\_\_ Each of the different pieces of code in a gene are called... (One from each parent.)  
I. genes                      J. genotypes                      K. phenotypes                      L. alleles

### PART TWO: True or False. **FIX THE FALSE ONES!**

10. True or False. DNA is found in every cell in your body.
11. True or False. Dominant alleles are always dominant to recessive alleles.
12. True or False. An organism could be homozygous and recessive for all their traits.

