

Name _____ Date _____ Per _____

Basic Genetics Worksheet 1

Answer the following question based on the information below.

The trait is coat color in dogs. Brown fur is dominant over a black fur.

B = Brown Fur

b = black fur

- 1) How would you write the genotype of a heterozygous brown furred dog?
- 2) How would you write the genotype of a homozygous black furred dog?
- 3) If a dog has brown fur what genotype(s) can it have?
- 4) If a dog has Black fur what genotype(s) can it have?
- 5) What would the phenotype be for a dog which has the alleles BB?
- 6) What would the phenotype be for a dog which has the alleles Bb?
- 7) What would the phenotype be for a dog which has the alleles bb?

Matching: Write the word that best fits the description below.

Alleles
Dominant
Recessive

Homozygous
Heterozygous
Genotype

Phenotype

- 8) When two different alleles are present, the allele that is completely expressed
- 9) When two alleles of a particular gene are the same
- 10) When two alleles of a particular gene are different
- 11) An organism's physical appearance
- 12) The set of alleles that an organism has
- 13) Different versions of a gene
- 14) When two different alleles are present, the allele that has no observable effect on the organism's appearance.