

NAME _____ BLOCK _____ DATE _____

Monohybrid Cross Worksheet

#1) Gene: Height
Alleles: Tall (T)
Short (t)
Mom: Homozygous recessive
Dad: Heterozygous

- a. Please complete the Punnet Square using the data above.
- b. Which is the dominant allele? What does being dominant tell us about this allele?
- c. What is the phenotype of the mother? Her genotype?
- d. What is the genotypic ratio of their offspring?
- e. What is the phenotypic ratio of their offspring?
- f. If they gave birth to 20 children, how many would be short?

#2) Gene: _____?
Alleles: Blonde hair (B)
Brunette hair (b)
Mom: Heterozygous
Dad: Heterozygous

- a. Please complete the Punnet Square using the data above.

- b. Name the gene that would have Blonde and Brunette hair as two of its alleles.
- c. What is the phenotype of the father? His genotype?
- d. What is the genotypic ratio of their offspring?
- e. What is the phenotypic ratio of their offspring?
- f. What fraction of their children would be homozygous dominant?
- g. If they had 50 children, how many of these children would have brunette hair?

#3) Gene: Foot size
 Alleles: Small feet (F)
 Large feet (f)
 Mom: _____?
 Dad: Homozygous dominant

Ff	Ff
Ff	Ff

- g. Using the completed Punnet square above, what is the genotype of the mother? What is her phenotype?
- h. What is the phenotype of the father? His genotype?
- i. What is the genotypic ratio of their offspring?
- j. What is the phenotypic ratio of their offspring?
- j. If these parents had 5 kids, how many of them would have small feet?