

Punnett Square Worksheet-Human Characteristics

Directions: Complete the following Punnett Squares. Be sure that you include the ratios of the genotypes (and the words used to describe those alleles) and phenotypes of the characteristics.

Scoring: Each problem is worth 3 points; 1 point each for the genotypes, 1 point for the phenotypes, and 1 point for the punnett square. Half points may be earned for partially correct information, so don't leave any blanks!

1. B= Brown eyes b= blue eyes Mom= Bb Dad= BB
 What are the eye color possibilities if they chose to have children?

Genotypes

Phenotypes

2. Curly hair is recessive, and straight hair is dominant. A woman with curly hair marries a man who is homozygous dominant for straight hair. Predict the outcomes for their children.

Genotypes

Phenotypes

3. Black hair is homozygous dominant. Brown hair is heterozygous. Blonde hair is homozygous recessive. (This is an example of incomplete dominance.) A woman with brown hair marries a man with brown hair. What are the possible outcomes for their kids?

Genotypes

Phenotypes

4. Attached earlobes are dominant over free hanging earlobes. Complete the Punnett Square for the following individuals: Mom=BB and Dad=bb

Genotypes

Phenotypes

5. Incomplete dominance problem: T=tall (5'11"-6'2"); Tt=medium height (5'4"-5'10")
 Mom= 5'5" t=short (5'3" or smaller)
 Dad= 6'0" What are the possible height outcomes of their children?

Genotypes

Phenotypes

6. Freckles are recessive. No freckles are dominant.
 Mom= heterozygous Dad=homozygous recessive

Possible outcomes for kids?

Genotypes

Phenotypes
