

## Genetics Worksheet

**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

- 1) For a 100% Tt genotype among a large number of offspring, the parents are
  - A) both TT.
  - B) both tt.
  - C) TT and tt.
  - D) Tt and tt.
  - E) tT and Tt.
  
- 2) For an offspring tally of 25% TT, 50% Tt and 25% tt, the parents are
  - A) both TT.
  - B) both tt.
  - C) both Tt.
  - D) Tt and tt.
  - E) Tt and TT.
  
- 3) The number of different kinds of genotype offspring from an Aa vs. Aa cross is
  - A) 1.
  - B) 2.
  - C) 3.
  - D) 4.
  
- 4) Through a PP vs. Pp cross, the chance of producing a dominant appearing offspring in the firstborn is 100%. The probability for a dominant second born is \_\_\_\_\_.
  - A) 0
  - B) 25
  - C) 50
  - D) 75
  - E) 100
  
- 5) Two different kinds of phenotypes are produced among the offspring from a genetic cross. The genotypes of the parents are
  - A) TT and TT.
  - B) TT and Tt.
  - C) Tt and tt.
  - D) Tt and Tt.
  - E) TT and tt.
  
- 6) In guinea pigs, the allele that produces dark color is dominant to the allele that produces light color. From a cross between two heterozygous organisms what is the chance of producing a light colored guinea pig?
  - A) 4/5
  - B) 3/4
  - C) 1/2
  - D) 1/4
  - E) 0