



Name: _____
Date Started: _____ Date Completed: _____ Score: _____

Learning Activity Sheet
Basic Principles of Mendelian Genetics

Directions: Read and understand each question carefully. Write the letter of the correct answer in the space provided before each number.

_____ 1. If a tall plant has a short parent, what is the genotype of the tall plant?

- A. TT
- B. Tt
- C. tt
- D. TTT

_____ 2. What is an allele?

- A. the basic unit of life
- B. another word for a gene
- C. a functional unit of heredity
- D. an alternative form of a gene

_____ 3. What does the word genotype refer to?

- A. a gene with abnormality
- B. the chromosome of an organism
- C. the genetic constitution of an organism
- D. the physical expression of a gene

_____ 4. How will you describe a person with a genotype tt?

- A. dominant
- B. heterozygote
- C. heterozygous
- D. recessive

_____ 5. Who is the Father of Genetics?

- A. Gregor Mendel
- B. William Bateson
- C. Reginald Punnett
- D. Thomas Hunt Morgan



- _____ 6. Which of the following is not a Mendelian law?
- A. law of dominance
 - B. law of segregation
 - C. law of inertia
 - D. law of independent assortment
- _____ 7. What does the word genotype refer to?
- A. the chromosome of an organism
 - B. the genetic makeup of an organism
 - C. a gene with abnormality
 - D. the physical expression of a gene
- _____ 8. Why did Gregor Mendel choose pea plants for his experiment?
- A. They have many visible traits.
 - B. They grew quickly in large amount.
 - C. Their mating was easy to control.
 - D. All of these
- _____ 9. Which of the following statements is true about Gregor Mendel?
- A. He used a dog to perform his experiment about genetics.
 - B. His ideas about genetics can apply to plants and animals.
 - C. He believed that genetic traits of parents will usually blend in their children.
 - D. His discoveries concerning genetic inheritance were generally accepted by the scientific community when he published them during the mid-19th century.
- _____ 10. What does the word phenotype refer to?
- A. undetected characteristics
 - B. the chromosome of an organism
 - C. the genetic makeup of an organism
 - D. an organism's appearance or other detectable characteristics