**GENETICS & HEREDITY VOCAB WORK Name: Date: Block:**

**Directions: Read the vocabulary and definitions in Part A, then follow the directions for Part B.**

**PART A:**

1. **Traits:** These are characteristics. For example, how you look, your personality, etc.
2. **Heredity:** This is the passing down of traits from parents to offspring.
3. **Inherit:** When you receive a genetic trait through heredity.
4. **Gene:** This is a segment of DNA that resides on a chromosome. You inherit two-- one from mom and one from dad. They are called the “basic units of heredity.” They code for traits, and there can be different forms of them.
5. **Homologous:** These are matching pairs of chromosomes that carry genes that code for the same trait. You get one from mom and one from dad. They are not identical, but they have the same genes in the same location on each chromosome.
6. **Allele:** This is the scientific name for the different forms of the same gene.
7. **Phenotype:** This is the name for the type of physical traits you show.
8. **Genotype:** This is the name for the type of genes/alleles you have inherited. It is represented by two letters.
9. **Dominant:** This type of trait is always expressed in the phenotype. It is represented in the genotype by a capital letter.
10. **Recessive:** This type of trait will be hidden by a dominant allele. It can only show if there are no dominant alleles present. It is represented in the genotype by a lower case letter.
11. **Homozygous:** This is the scientific word used for when two of the same alleles are inherited. Offspring are also referred to as “purebred.”
12. **Heterozygous:** This is the scientific word used for when the two alleles are different. Offspring are also referred to as “hybrid.”
13. **Gregor Mendel**: Considered the “Father of Genetics.”
14. **Peas:** These are the type of plants that Gregor Mendel studied. The traits he studied in these plants included color and shape of flowers and leaves, and plant height.

**PART B: WRITE THE VOCAB WORD FROM PART A (ABOVE) ON THE BLANK IN FRONT OF THE DEFINITIONS BELOW:**

1. This is the passing down of traits from parents to offspring.
2. These are characteristics. For example, how you look, your personality, etc.
3. This is a segment of DNA that resides on a chromosome. You inherit two-- one from mom and one from dad. They are called the “basic units of heredity.” They code for traits, and there can be different forms of them.
4. When you receive a genetic trait through heredity.
5. These are matching pairs of chromosomes that carry genes that code for the same trait. You get one from mom and one from dad. They are not identical, but they have the same genes in the same location on each.
6. This the “father of genetics.”
7. This is the scientific name for different forms of the same gene.
8. This is the name for the type of physical traits you show.
9. This is the name for the type of genes/alleles you have inherited. It is represented by **two** letters.
10. This type of trait is always expressed in the phenotype. It is represented in the genotype by a capital letter.
11. These are the type of plants that the Father of Genetics studied. The traits he studied in these plants included color and shape of flowers and plant height.
12. This type of trait will be hidden by a dominant allele. It can only show if there are no dominant alleles present. It is represented in the genotype by a lower case letter.
13. This is the scientific word used for when two of the same alleles are inherited. Also referred to as “purebred.”
14. This is the scientific word used for when the two alleles are different. Also referred to as “hybrid.”