## Mendelian & Non-Mendelian Genetics Review Stations

*Station 1: Match the correct word with its correct definition and write in your notes below.*

Trait - _____

Heredity - _____

Genetics - _____

Gene - _____

Genotype - _____

Phenotype - _____

Allele - _____

Dominant Allele - _____

Recessive Allele - _____

Homozygous - _____

Example of Homozygous Dominant & Homozygous Recessive - _____

Example of Heterozygous - _____

Law of Dominance - _____

Law of Independent Assortment - _____

Co-dominance - _____

Law of Segregation - _____

Incomplete Dominance - _____

Polygenic Traits - _____

*Station 2: Monohybrid Cross Station*

1. What are the genotypes of the parents? _____

2. What are the genotypes of the offspring? _____

3. What are the phenotypes of the offspring? _____

4. What is the genotypic ratio of the offspring? _____

5. What is the phenotypic ratio of the offspring? _____

6. Cross two of the F1 generation and record the genotypic and phenotypic ratio of the F2 generation.

***Station 3: Dihybrid Cross***

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1. What is David Beckham's genotype? _____

2. What is Victoria Beckham's genotype? _____

3. What are David Beckham's gamete combinations? _____

4. What are Victoria Beckham's gamete combinations? _____

5. What percentage of the offspring will have hazel eyes and a widows-peak? _____

6. What percentage of the offspring will have dark brown eyes and a widows-peak? _____

7. What percentage of the offspring will have hazel eyes and a straight hairline? _____

8. What percentage of the offspring will have dark brown eyes and a straight hairline? _____

***Station 4: Incomplete Dominance***

1. What are the genotypes of the parents? _____

2. What are the genotypes of the offspring? _____

3. What are the phenotypes of the offspring? _____

4. What percentage of the offspring are red? _____

5. What percentage of the offspring are pink? _____

6. What percentage of the offspring are white? _____

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7. Cross two of the offspring and record the percentage of red, pink, and white flowers.

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*Station 5: Co-Dominance*

1. What are the genotypes of the parents? _____

2. What are the genotypes of the offspring? _____

3. What are the phenotypes of the offspring? _____

4. What percentage of the offspring will be black? _____

5. What percentage of the offspring will be brown? _____

6. What percentage of the offspring will be black and brown? _____


*Station 6: Multiple Alleles*

1. What are Kylie and Travis genotypes? _____

2. What are the genotypes of the offspring? _____

3. What is the genotypic ratio of the offspring? _____

4. What is the phenotypic ratio of the offspring? _____