Human and Population Genetics

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**Reagents:**

* PTC test strips
* Mirror (for observing physical traits)
* Laboratory Manual
* Data recording sheet

**Experiment Summary**  
 This experiment aims to analyze various human genetic traits controlled by single-gene inheritance patterns. Participants will examine their phenotypes for traits such as tongue rolling, widow’s peak, thumb crossing, attached earlobes, dimpled chin, mid-digital hair, PTC-tasting, and lactose tolerance.

We will compare their phenotypic traits to known dominant and recessive alleles to determine their genotype possibilities. The experiment includes a PTC taste test to identify individuals who possess the dominant allele for PTC sensitivity. Observations will be recorded in Table 8.1, followed by class data compilation in Table 8.2 to assess phenotype frequencies within the section. This activity aims to enhance our understanding of Mendelian inheritance and population genetics.