

# Genetics of Taste Worksheet

## Class Total Data Chart

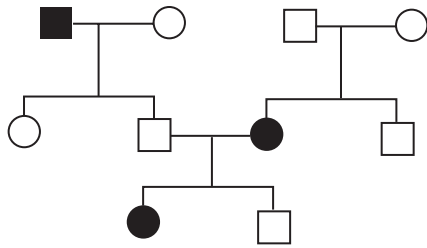
	PTC		Thiourea		Sodium Benzoate					
	Taster	Non-taster	Taster	Non-taster	Sweet	Sour	Salty	Bitter	Other	Non-taster
<b>Yourself</b>										
<b>Class Data</b>										
<b>%</b>										

1. How do the percentages of tasters versus non-tasters compare between PTC and thiourea? Were the tasters the same individuals for both substances?
  
2. What general statement can you make about being a taster and non-taster relative to PTC and thiourea?
  
3. How does the ability to taste sodium benzoate compare to the ability to taste PTC or thiourea?
  
4. How would you describe the variation in individuals in their ability to taste different substances?
  
5. Analyze the statement "The ability to taste is inherited." What do you think? Defend your answer.

# PTC Worksheet

A typical pedigree might look like the following:

G1 Grandparents



G2 Parents

G3 Children

■ = Male with trait

□ = Male without trait

● = Female with trait

○ = Female without trait

In a pedigree chart, same generations are kept on the same line. (G1, G2, etc.) Individuals who have children are connected with a horizontal connecting line and resulting children are shown below in the next generation connected to their parents.

In the space below draw your family pedigree for the ability to taste PTC.

Assign symbols for alleles for tasting and non-tasting to individuals in your pedigree. Can the ability to taste PTC be dominant? Can it be recessive? Defend your answer.