TRAIT	VERSION 1	VERSION 2	GENETIC INERITANCE What is the current opinion of how this trait is inherited?
Earlobe Attachment	**Attached Earlobes**	**Detached Earlobes**	
Tongue Rolling	**Can Roll Tongue**	**Can't Roll Tongue**	
Cleft Chin	**Has Clift Chin**	**Smooth Chin**	
Dimples	**Dimples (1 or both sides)**	**No Dimples**	
Handedness	**Right Handed**	**Left Handed**	
Freckles	**Has Freckles**	**No Freckles**	
Hair Shape	**Naturally Curly Hair**	**Naturally Straight Hair**	
Hand Clasping	**Right Thumb On Top**	**Left Thumb On Top**	
Colorblindness	**Normal Color Vision**	**Colorblind**	
Hairline Shape	**Widow's Peak Hairline**	**Straight Hairline**	
PTC Tasting	**Can Taste PTC**	**Can Not Taste PTC**	
# of Fingers	**6 Fingers On Each Hand**	**5 Fingers On Each Hand**	

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TRAITS LAB POST-LAB QUESTIONS: **Name: _____ Per: ___**

1. Read the supplemental handout and determine how each of these traits is inherited. Use this information to fill in the 4th column of the table. Include if one version of the trait is considered to be dominant whenever possible.

2. Some of the traits you looked at in this lab are considered to be **MONOGENIC TRAITS**. This means that the characteristic observed is controlled by a SINGLE gene. Only a few of our traits are monogenic while most of our traits are considered to be **POLYGENIC**. Explain what this means.

Most of our traits have more than one way they can appear. For example, the EYE COLOR trait can appear as shades of brown, green, or blue. When different variations of the gene exist for the same trait, they are called ALLELES.

3. Describe what a **DOMINANT ALLELE** is and explain when it will show up in a person.

4. Describe what a **RECESSIVE ALLELE** is and explain when it will show up in a person.

"Traits caused by dominant alleles are always more common than those caused by recessive alleles."

5. **Explain** whether the statement above is ***true*** or ***false*** and provide a specific example to support your answer.

6. Mr. Ruzicka loves vegetables! Two of his favorite veggies are **broccoli** and **brussel sprouts**. Make a prediction of whether Mr. Ruzicka can taste **PTC** or not. Explain how you came to this conclusion and what the connection is to his love of broccoli and brussel sprouts.

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