Family Traits

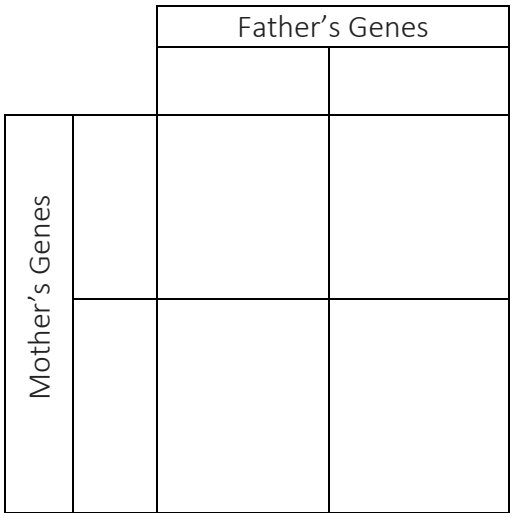
Looking for Phenotypes and Genotypes in your family

1. Identify several unique traits that you have. This may include hair color, eye color, curly hair, widow's peak, hitchhiker thumb, longer than usual finger or toe, attached earlobes, dimples, cleft chin, or any other characteristic that makes you who you are. Use the data table on the back of this sheet to help.

2. Use the chromebooks to look up the traits and determine if it is dominant or recessive.

3. Once you have a list of traits go home and look at your parents, grandparents, and siblings. Use pictures if that is all you have, but try to identify similar traits among your family and see if you can put together your phenotype and genotype for as many of the traits as you can from your list. Determine from your data if you believe the trait is a dominant or recessive trait, or if the trait expresses complete or incomplete dominance.

4. Draw Punnett squares to show what possible traits your parents may give their children.



5. Once you have identified the traits and made the Punnett squares determine the probability for you having all of your traits.

Examples of incomplete dominance

- A child with wavy hair as a result of one parent's curly hair and the other's straight hair.
- that is in between each.
- One parent has a large lip protrusion, the other parent has a small lip protrusion and the child has an average lip protrusion.
- One parent has a high voice, the other parent has a low-pitched voice, so the child has a voice of medium pitch.
- A person with big hands and a person with small hands have offspring with hands of average size.