Genetics Name:

You're a Parent! Period:

Humans have 23 chromosome pairs. One of these pairs (pair number 23) contains the sex chromosomes that decide what gender our offspring will be. Human females have the combination XX, which split during meiosis so each egg has an X chromosome. Human males have the combination XY, which also split during meiosis, but in this case sperm can carry either the X or the Y chromosome. Because the male has either X or Y, the male's chromosomes determine the sex of the child.

You will fill out the table below by flipping a colored disk. Start by flipping a disk for the father. If the disk is red, write down X for the chromosome passed on by the father. If the disk is yellow, the baby gets a Y chromosome. Next, fill in the chromosome for the mother (you don't flip the disk! Why not? Reread the first paragraph!)

Next, fill in the column for gene from mother or gene from father (depending if you are male or female, of course). The genes from you should reflect your traits. Then you will flip the disk for the traits from the other parent. If the disk lands with the red side up, write down the capital letter for the dominant trait. If the side facing up is yellow, write the lowercase letter for the recessive trait.

Remember that genotypes list the letter codes for the genes, while phenotypes are the traits that you would see.

Trait	dominant	recessive	gene from mother	gene from father	genotype	phenotype
gender of child	none	none				
face shape	round (R)	square (r)				
hair color	brown (B)	blond (b)				
eyebrows	thick (T)	thin (t)				
eye size	large (L)	small (l)				
eye color	brown (C)	blue (c)				
eyelashes	long (E)	short (e)				
cheek freckles	freckles (F)	none (f)				
lips	thick (K)	thin (k)				
dimples	dimples (D)	none (d)				