

Name:

Science, Genetics



NAME: Human Genetics Lab Data and Journal Questions Fill out and post to the discussion board. Human Phenotypes and Genotypes | | | | Check only one: | | Trait | Your Phenotype | Possible Genotype(s) | Dominant | Recessive | Intermediate | a | Tongue Rolling | Can Not roll Tongue | rr | x | | | b | Earlobes | Unattached | EE, Ee | x | | | c | Hairline | Widow's Peak | WW, Ww | x | | | d | Freckles | No Freckles | ff | | x | | e | Eye Shape | Almond | AA, Aa | x | | | f | Eye Color | Blue | bb | | x | | g | Eyelash Length | Short | ee | | x | | h | Hitchhikers Thumb | No Hitchhikers' Thumb | bb | | x | | i | Mid-digital Hair | Mid-digital Hair | HH, Hh | x | | | j | Hand Clasp | Hand Clasp | LL or Ll | x | | | k | Bent Little Finger | No Bent Little Finger | bb | | x | | | Dimples | No Dimples | dd | | x | | m | Hair Texture | Curly Hair | HH | | x | | |

TOTALS | | Trait | Dominant | Recessive | Intermediate | a | Tongue Rolling | 5 | 1 | 0 | b | Earlobes | 3 | 3 | 0 | c | Hairline | 4 | 2 | 0 | d | Freckles | 5 | 1 | 0 | e | Eye Shape | 3 | 3 | 0 | f | Eye Color | 4 | 2 | 0 | g | Eyelash Length | 1 | 5 | 0 | h | Hitchhikers Thumb | 2 | 4 | 0 | i | Mid-digital Hair | 1 | 5 | 0 | j | Hand Clasp | 6 | 0 | 0 | k | Bent Little Finger | 3 | 3 | 0 | l | Dimples | 2 | 4 | 0 | m | Hair Texture | 5 | 1 | 0 |

Questions 1. Predict: What three traits will be most common among your classmates? Why have you made this prediction? I predict that the most common traits among my classmates are hand clasping, tongue rolling, and hair texture. I predict this because these traits are the ones I see the most in my life. 2. Review your previous prediction — were you correct? Research one of the traits that you listed in your prediction. Find the percentages of occurrence in a human population— these may be theoretical. What did you find out? Did our class reflect these percentages? If not, explain. I was correct on hand clasping, hair texture, and

tongue rolling. Most of the people I interviewed could roll their tongue. I was surprised when all six of them clasped their hands with their left thumb or their right thumb. After doing some research on hand clasping I found out that nearly 40-75% of people prefer left thumb over right thumb. I also learned that hand clasping is not a simple genetic trait. There is no clear idea where the left thumb is dominant over the right thumb came from. Also you should not demonstrate hand clasping in basic genetics. 3. Recently, tongue rolling has become controversial. Research is now being published that demonstrates that the ability to roll one's tongue is NOT an inherited trait. What would be an example that disputes this long-believed genetic trait? For an example neither of my parents can roll their tongue, but my brother can and I can't.