

Any Matches?

1. Is your baby's genotype exactly like either of its parents? If so, which one?
2. Is your baby's phenotype exactly like either of its parents? If so, which one?
3. Do any of the babies in the class share the same genotype? If so, how many?
4. Do any of the babies in the class share the same phenotype? If so, how many?
5. How many people in the class, parents or babies, share the same genotype?
6. How many people in the class, parents or babies, share the same phenotype?
7. If you repeated this exercise using four different traits, such as curly vs. straight hair, normal vs. flat feet, dimpled vs. non-dimpled cheeks, and smooth vs. cleft chin; which would you expect to see more of: identical genotypes or identical phenotypes? Explain your reasoning.
8. For a mother with the genotype Rr and father who also has the genotype Rr , what is the probability that their baby will *not* be able to roll his or her tongue? Be sure to show how you got your answer.
9. For a mother with the genotype BB and a father with the genotype bb , what is the probability that their baby will have blue eyes? Show how you got your answer.
10. For a mother with the genotype Dd and a father with the genotype dd , what is the probability that their baby will have detached earlobes? Show how you got your answer.
11. For a mother with the genotype Ll and a father with the genotype LL , what is the probability that their baby will have long eye lashes?