Any Matches? Questions Handout

- 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 Partner 1 with the genotype Rr and Partner 2 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 Partner 1 with the genotype BB and Partner 2 with the genotype bb, what is the probability that their baby will have blue eyes? Show how you got your answer.

10. For Partner 1 with the genotype Dd and Partner 2 with the genotype dd, what is the probability that their baby will have detached earlobes? Show how you got your answer.

11. For Partner 1 with the genotype LI and Partner 2 with the genotype LL, what is the probability that their baby will have long eye lashes?

