

Molecular Evolution Simulation

Name(s) _____

1. Explain why there is no point in adding more generations after all the worms are one color (when an allele has become fixed)?
2. At a **population of 5**, what is the mean number of generations until an allele becomes fixed?

Trial #	Generation at which allele become fixed
Mean # of generations to fixation	

3. At a **population of 10**, what is the mean number of generations until an allele becomes fixed?

Trial #	Generation at which allele become fixed
Mean # of generations to fixation	

4. What is the mathematical relationship between population size and the number of generations it takes for an allele to become fixed?

5. Compare your answers with your classmates. Does the mathematical relationship between the number of generations and the time for an allele to become fixed apply to different population sizes?

6. What did you like **least** about this activity?

7. What did you like **best** about this activity?

Random Number Table

2700119961397562486901010281413521161522670276906582043608
8973628262312581121379768268873723555680353014833046077988
0624745445678289763476919487420480481158508861378419396559
433153