

OBSERVATIONS:

Data Table

GENERATION	WHITE MICE	BROWN MICE	LIVE	DIE
1				
2				
3				
4				

Questions

1. After Generation 1...

- a. How many White alleles were remaining? _____ %
 b. How many Brown alleles were remaining? _____ %

2. After Generation 2...

- a. How many White alleles were remaining? _____ %
 b. How many Brown alleles were remaining? _____ %

3. After Generation 3...

- a. How many White alleles were remaining? _____ %
 b. How many Brown alleles were remaining? _____ %

CRITICAL THINKING:

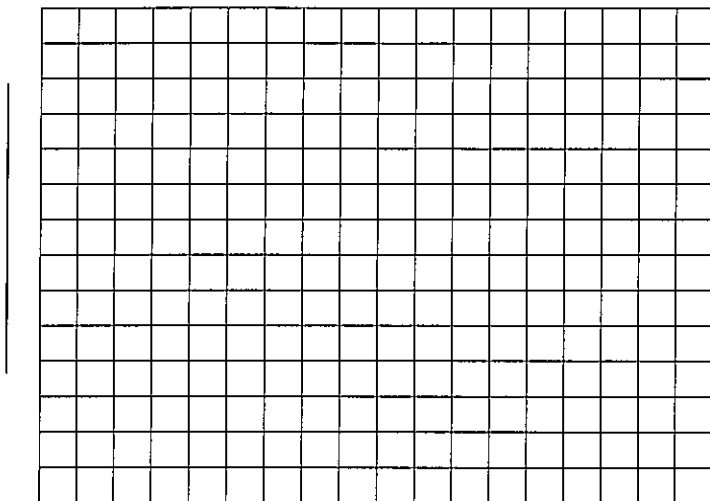
1. How were you able to tell brown mice from white mice? Hint: The answer is not “the picture.” _____

2. How many white mice were produced in the first generation? _____ How many brown mice? _____
3. How many white mice were produced in the second generation? _____ How many brown mice? _____
4. How many white mice were produced in the third generation? _____ How many brown mice? _____
5. How many white mice were produced in the fourth generation? _____ How many brown mice? _____
6. How many brown mice were produced in the first generation? _____
 What factor(s) determined how many brown mice were produced? _____

7. How many brown mice were produced in the second generation? _____
 What factor(s) determined this number? _____

8. What happened to the number of brown mice produced in the third and fourth generations? _____
How do you account for this? _____

9. Graph the number of brown alleles in each generation



Graphing Hints:

- The independent variable such as time (generations) goes on the X-axis.
- The dependent variable (the thing being changed), such as the number of brown alleles, goes on the Y-axis.
- Label the axes on the lines provided!

10. Describe the trend of brown alleles over time. _____

11. As the number of brown alleles decreases, what happens to the number of brown mice? _____

1. Describe the collective appearance of the mice in this population, using a single word. _____

12. Describe how an individual mouse's appearance is likely to affect its fate. _____

13. Which mice survive to reproduce? (don't just answer "white") _____

14. What advantage does a white mouse have in this environment? _____

15. To what extent is chance a factor in determining whether or not a brown mouse survives? _____

16. How does this model illustrate the concept of Natural Selection? _____

