

Name: _____

Block: _____

QUACKERS

INVESTIGATING NATURAL SELECTION

HYPOTHESIS:

DATA AND OBSERVATIONS:

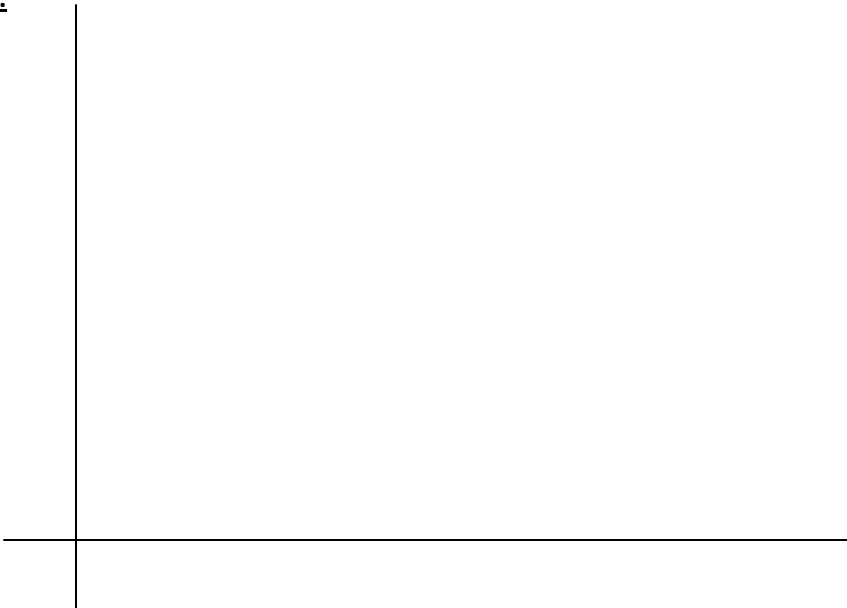
DATA TABLE 1: LIGHT AND DARK QUACKERS EACH GENERATION		
GENERATION	LIGHT CRACKERS	DARK CRACKERS
1	3	7
2	2	8
3	3	7
4	0	10
5	1	9

ANALYSIS:

DATA TABLE 2: CLASS AVERAGES LIGHT AND DARK QUACKERS EACH GENERATION		
GENERATION	AVERAGE LIGHT CRACKERS	AVERAGE DARK CRACKERS
1	4.3	5.7
2	3	7
3	2.3	7.7
4	1.6	8.4
5	1.4	8.6

Graph the class average generation vs. average (you will draw 2 lines)

GRAPH:



CONCLUSION QUESTIONS: Answer the following questions.

1. Write a statement describing how the number of light and dark quackers changed over the period of 5 generations.
2. What do you predict would happen to the number of light quackers if you had continued predation for a total of 10 generations? Explain your prediction.
3. Which type of quacker would Darwin consider “most fit” in this predation situation, the light quacker or the dark quacker? Why?
4. What adaptation do these quackers possess that allows them to survive?
5. Explain why it is incorrect to say that an organism adapts to its environment.
6. What changes in the population would occur if the predation changed and began to prefer the dark quackers? Explain why these changes would occur?