#5

FORMING CONCLUSIONS

A conclusion is based on the data of an experiment, but it is not only a restating of the data or results. It takes into consideration the analysis of the data, and discusses the meaning of the data. It explains why the data occurred, or why the results happened the way the did. It discusses whether the data confirmed or disproved the original hypothesis and how the data proves or disproves the hypothesis.

Factors Affecting Growth Rate of Plants

	Plant Height (cm)		
	Day 1	Day 7	Day 14
Plant A (1 hr sun/day)	5.2 cm	6.5 cm	7.1 cm
Plant B (4 hrs sun/day)	4.9 cm	7.4 cm	9.4 cm
Plant C (8 hrs sun/day)	5.0 cm	8.8 cm	12.8 cm

Conclusion: _____

Relative Reaction Rates of Liver Catalase as a Function of Temperature

Temperature (°C)	Rate of Enzyme Activity (estimated 0 - 5)
0 °C	0
20°C	3
37°C	5
100°C	0

Conclusion: _____

Relative Reaction Rates of Liver Catalase as a Function of pH

pH (0 -14)	Rate of Enzyme Activity (estimated 0 -5)
3	1
5	3
7	5
8	2
10	0

Conclusion: _____

_____

_____

_____

_____

_____

Osmosis in Various Solutions

	Mass of the Egg (grams)			
	Fresh Egg (Before Soaking)	After Vinegar Soak (24 hrs)	After Water Soak (24 hrs)	After Corn Syrup Soak (24 hrs)
Egg A	35.7 g	42.0 g	55.2 g	-------
Egg B	39.2 g	45.6 g	-------	28.4 g

Osmosis is the passing of water across a membrane from an area of high water concentration to an area of low water concentration. In the lab below, raw eggs were soaked in vinegar to remove the shell, leaving a thin membrane. Then the eggs were soaked in one of two other solutions to test the direction of osmosis (either *into* or *out* of the egg). If water travels into the egg, the solution must have been hypotonic. If water travels out of the egg, the solution must have been hypertonic. Another note: vinegar and corn syrup do have water as one of their ingredients.

Conclusion: _____

_____

_____

_____

_____

_____