

## Scientific Method Scenario- Mice

A scientist observed that mice fed seeds appeared to grow more than mice fed just leafy green and yellow vegetables. Why? The scientist hypothesized that the protein in the seed accounted for the increased growth. He made a prediction that if he fed a group of mice a diet high in protein they should grow more than a group fed little protein. He got 200 mice of the same age, size, and gender and divided them into two groups of 100 each. He weighed each and fed Group A- a diet low in protein and Group B- the same food except he added a protein supplement. Both groups received the same amount of food each day. He checked the mass of each mouse each day and kept accurate records for 14 days. He noted that the group with the protein supplement added an average of 12 grams of weight in the two weeks whereas the other group added an average of 8 grams of weight in the two weeks.

Amount of Mass Gained by Mice on Differing Protein Diets		
	Group A Diet low in protein	Group B Diet with protein supplement
Average mass gained	12 g	8 g

1. Identify the problem.
2. State the scientist's hypothesis.
3. What step in the scientific method followed the making of a hypothesis?
4. Identify the control *group*.
5. List at least 4 control variables.
6. Identify the experimental *variable*.
7. Was the scientist's hypothesis supported or not supported?  
  
\*\*Explain HOW you know using the data from the experiment.
8. If the scientist's hypothesis was not supported, what should he do?