

# [Dino grow lab essay](https://assignbuster.com/dino-grow-lab-essay/)

Nicholas Pancerella Dino Grow Lab I. Introduction The purpose of this experiment was to see if these toy dinosaurs would grow six times larger than their original size, as the package stated, if they were soaked in water for four days.

My hypothesis for this experiment is that if the dinosaur is soaked in water for four days, then the dinosaur would grow six times larger than its original size in all four categories of measurement (mass, length, volume, and width). II. Materials • toy dinosaurs • water • graduated cylinder • scale • ruler with metric measurements calculator • container to hold dinosaurs soaked in water III. Procedure 1. Before soaking the dinosaurs in water, we took measurements of these dinosaur’s mass, length, volume, and density.

2. After taking the measurements, we let the dinosaurs soak in water for four days. 3. After four days, we removed the dinosaurs from the water and measured their mass, length, volume and density. 4. After taking our final measurements we calculated percent change between the initial and final measurements, and we constructed a conclusion .

IV. Data Data Measurements | Before | After | Percent Changed | | Mass (grams) | 3. 2 | 47. 1 | 1472% | | Length (centimeters) | 5. 9 | 10.

3 | 175% | | Volume (milliliters) | 4 | 45 | 1125% | | Density (grams per milliliter) | 0. 8 | 1. 5 | 131% | V.

Data Analysis Calculations: As shown on my table, mass and volume increased by over six hundred percent. Length and density failed to increase by the promised six hundred percent. However, the average percent change of all four measurements is 726%, which exceeds the 600% increase as stated on the product package. VI. Discussion and Conclusions From the results that I received from this experiment, I have concluded that my hypothesis was only partly correct.

In my hypothesis, I predicted that the dinosaur would grow to six hundred percent of its original size. I was correct in hypothesizing that the dinosaur would grow to six hundred percent of its original size in its mass and volume, but I was incorrect in saying that the dinosaur would grow to six hundred percent of its original size in its length and density. One interesting fact that I discovered from my calculations was that the average increase of the four categories of measurement was 726%. The only unexpected results that I observed from this experiment were that the mass and volume of the dinosaur had a much larger percentage increase than the density and length of the dinosaur.

I predicted that all of the results in the in the categories of measurement would all increase equally. The only sources of error that I discovered as I was observing this experiment was that the dinosaurs should have been dried to remove absorbed water before they were weighed for the final measurements, as this absorbed water increased the weight. I also felt that part of the calculation instructions for the experiment should have been to average all of the categories of measurement in order to discover the true increase in size of the dinosaur.