

The scientific method critique essay

[Education](#), [Learning](#)



The scientific method is a hypothesis-driven process of inquiry. The goal is to ask and answer scientific questions by making observations and doing experiments. This week we were asked to complete the scientific method activity on the student website. I participated in both experiments, but I found the car experiment to be a bit more of a challenge. I had to apply the steps of the scientific method several times before I finally arrived at a resolution.

The Car Experiment. The car experiment began with an observation; something is wrong with the vehicle because it will not start. In an effort to explain my observation I ask the question; " Why won't the vehicle start? " There could be a number of reasons why the vehicle will not start, so the next step is to hypothesize the solution and outcome. The website provided us with the following 3 hypotheses: 1. The car needs fluids. 2. The car battery is not working. 3. There are electrical problems. The next step is to make a prediction.

I predicted that the vehicle must have an issue with the battery. I chose this hypothesis first, because it is not uncommon for someone to leave a dome light on and accidentally drain their battery. While it is not uncommon to run out of fuel, I did not select this answer because in this day and age most vehicle owners keep an eye on their fuel levels to ensure that they have an adequate amount for the next day. The conclusion details the findings of your prediction. In this case the vehicle's battery was fine.

The results tie back into my hypothesis. The result was refuted, and I must now begin the process from the top to find the correct scientific method to

remedy the problem. I had to repeat the scientific method 3 times until I found the solution to my problem. The vehicle had faulty electrical issues, and once the fuses were replaced it started right up. A real-life problem that I could use the scientific method to solve is a problem I have been having recently with my new vacuum. It is less than 3 months old and it has been acting strangely.

I can use it one day for an hour without any problems, and two days later I can turn it on but it will only work for 3 or 4 minutes before shutting off. The steps that I would take to solve the problem are: 1. Make an Observation 2. Question: " Why is my vacuum not working properly? " 3. Thesis: Develop a hypothesis about why the vacuum may be acting strangely. It has electrical problems. It is clogged. It is faulty and I should contact the manufacturer. 4. Prediction 5. Conclusion 6. Results