

Gabby Alfred
Period 3
1P Chemistry

Fundamentals of Experimental Design

What is measured during a controlled experiment?

Why?

Working in the science lab can be a lot of fun. Mixing random chemicals and burning stuff just to see what happens can be entertaining (and possibly dangerous), but it doesn't lead to anything helpful to the scientific community. In order to be helpful to the community, a researcher's work in the lab must be systematic. A researcher usually asks a question and then designs an experiment to investigate that question. In this activity you will identify different types of variables that will help you design controlled experiments.

Model 1 – Alka-Seltzer® and Vinegar



- Briefly describe the reaction illustrated in Model 1 in one or more complete sentences.
An Alka-Seltzer was dropped into 100.0 mL vinegar (23.5°C). The temperature changed, resulting in a 22.6°C 100.0 mL solution.
- Did the room pressure change as the reaction occurred? If yes, was there an increase or decrease?
No, there was no change in room pressure.
- What two pieces of evidence observed during the "mix" phase of the reaction suggest that a chemical change is taking place?
There was bubbling & the temperature was changing.
- Did the solution temperature increase or decrease during the reaction?
The solution temperature decreased by .9°C.

Pogil Fundamentals Of Experimental Design

William J. Diamond



Pogil Fundamentals Of Experimental Design:

Decoding **Pogil Fundamentals Of Experimental Design**: Revealing the Captivating Potential of Verbal Expression

In a period characterized by interconnectedness and an insatiable thirst for knowledge, the captivating potential of verbal expression has emerged as a formidable force. Its ability to evoke sentiments, stimulate introspection, and incite profound transformations is genuinely awe-inspiring. Within the pages of "**Pogil Fundamentals Of Experimental Design**," a mesmerizing literary creation penned with a celebrated wordsmith, readers attempt an enlightening odyssey, unraveling the intricate significance of language and its enduring impact on our lives. In this appraisal, we shall explore the book's central themes, evaluate its distinctive writing style, and gauge its pervasive influence on the hearts and minds of its readership.

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