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**Practice BCR : Scientific Method (5 points)**

A student reads an advertisement from a fertilizer company. The advertisement claims their fertilizer increases the growth of tomato plants by 25 percent. The student decides to perform an experiment to test this claim. She performs the following procedure.

1. Choose three similar-sized tomato plants.
2. Plant each tomato plant in a small pot.
3. Place all three small pots into one container and place on a window sill.
4. Add fertilizer mixed with water to Plants 1 and 2.
5. Add only water to Plant 3.
6. Record the heights of the three plants after four weeks.

The student's results are shown in the table below.



Analyze the student's experiment to determine if it supports the claims made in the fertilizer company's advertisement. In your response, be sure to include

* a description of the data needed to support the company's claim
* an explanation of the results of the student's experiment
* an evaluation of the student's experiment
* a description of any changes you would make to the experiment; explain your answer

You may write your response on the back of this sheet or attach an additional sheet. You may also e-mail me your response.

Grading Rubric:

|  |  |
| --- | --- |
| **0** | No response/irrelevant response |
| **1** | No bullet point fully addressed |
| **2** | Only one bullet point fully addressed or 2 bullet points incompletely addressed |
| **3** | Two bullet points fully addressed or 3 bullet points incompletely addressed |
| **4** | 3 bullet points fully addressed or 4 bullet points incompletely addressed |
| **5** | All bullet points are completely addressed |