

NAME \_\_\_\_\_

**Use the information provided below to answer questions 1-4**

Twenty-five geranium plants were placed in each of four closed containers and then exposed to the light conditions shown in the data table. All other environmental conditions were held constant for a period of two days. At the beginning of the investigation, the quantity of carbon dioxide (CO<sub>2</sub>) present in each container was 250 cm<sup>3</sup> (cubic centimeters). The data table shows the amount of CO<sub>2</sub> remaining in each container at the end of two days.

| Container | Color of Light | CO <sub>2</sub> at start (cm <sup>3</sup> ) | CO <sub>2</sub> after 2 days (cm <sup>3</sup> ) |
|-----------|----------------|---|---|
| 1         | blue           | 250   | 50  |
| 2         | red            | 250   | 75  |
| 3         | green          | 250   | 200   |
| 4         | orange         | 250   | 150   |

1. The variable in this investigation was the
  - a.) type of plant
  - b.) color of light
  - c.) amount of CO<sub>2</sub> in each container at the start of the investigation
  - d.) number of days needed to complete the investigation
  
- 2.) State the problem being investigated in this experiment.
  
  
  
  
  
  
  
  
  
  
- 3.) Which container held the plant that performed the most photosynthesis during the course of the investigation? What factor did you base your conclusion on?
  
  
  
  
  
  
  
  
  
  
4. Which of the light sources was the least effective for photosynthesis and what piece of evidence leads you to this conclusion?