

Identifying Variables in Scientific Experiments

Name: _____

Tonya and Dylan were doing an experiment to see what happens when baking soda and vinegar are mixed together in a "closed system". Look at the pictures of the investigation to answer the questions below.

Trial 1:
10 mL of Vinegar
5g of baking soda



Trial 2:
10 mL of Vinegar
10g of baking soda



Trial 3:
10 mL of Vinegar
1g of baking soda



1-What is the question they are trying to answer?

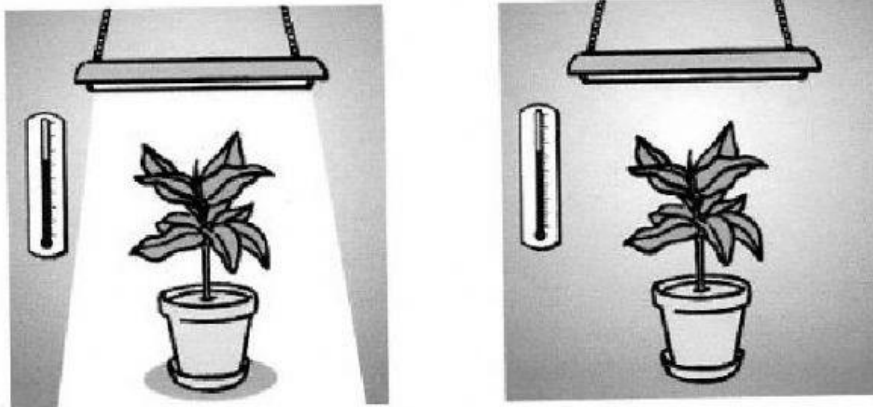
2-What is the independent variable?

3-What is the dependent variable?

4-What did they keep the same (controlled)?

5-Write a conclusion for the experiment?

A student was doing an experiment using the scientific method. A picture of the student's project is shown below.



There are **different variables** in the experiment:

- a. the type of soil the plant is growing in
- b. the brightness of the light is shining on the plant
- c. the temperature of the air in which the plant is growing
- d. the plant type
- e. Plant Growth

Look at the picture carefully, from the above experiment identify:

One variable that is **changed** (choose from the above and write it in the box below)

The **variable** that is **measured** (choose from the above and write it in the box below)

The **variables** kept the **same** (choose from the above and write it in the box below , use comma to write the variables)