

You are designing an experiment to determine whether plants grow faster with or without water.

Which should be varied in order to conduct a controlled experiment?

- A. the type of soil in which you grow the plants
- B. the temperature of water you give to the plants
- C. the amount of sunlight your plants receive
- D. the amount of water you give to the plants

The dependent variable can be represented by ?

- A. A possible answer to a scientific question
- B. Describes an observed pattern in nature.
- C. This represents the variable that gets measured.
- D. The many ways in which scientist study the natural world.

What is the difference between independent and dependent variable?

Scientific investigations involve many steps and processes. **Which characteristics define a laboratory experiment?**

- A. hypothesis, models, and calculations
- B. test variables, data, and uncontrolled conditions
- C. data, conclusions, and unregulated environment
- D. independent and dependent variables, data, and controlled conditions

• Scientists conduct many types of scientific investigations. Their efforts often include fieldwork, surveys, models, and experiments. **Which statement about scientific investigations is true?**

- A. They rarely involve the collection of data under controlled condition
- B. They follow exactly the same steps because there is only one scientific method.
- C. They include multiple trials to increase the consistency of the data that are collected.
- D. Their primary focus seldom includes comparing or describing the unregulated world.

