

DATA TYPES AND VARIABLES

For the following experiments, determine the independent, dependent variables and control group.

1. Gina wants to determine which liquid works best for growing beans. She watered one with diet coke, one with lemonade and one with plain water. After one week she measured how high each had grown.

Plant watered with plain water

How much the plant had grown

Plant watered with diet coke or lemonade

Dependent variable

Independent variable

Control Group

2. Jason wants to find out what fertilizer ratio works best for growing sunflowers. He put 13-13-13 on one plant, 20-10-20 on another plant and no fertilizer on a third plant. He measured each plant's growth after two weeks. In this experiment, the various fertilizer ratios is the variable. The amount of growth is the variable and the plant with no fertilizer is the .

dependent

control group

independent

3. A group of students worked in separate teams to measure the height of a classroom lab desk. Here are the results of their data.

Team 1	Team 2	Team 3	Team 4	Team 5	Team 6	Team 7
1.31 m	1.29 m	1.33 m	1.28 m	1.31 m	1.3 m	1.29 m

The actual height of the lab desk is 0.91 meters. The group's measurements would be considered but not .

4. Look at the targets below. Select the correct representation for accuracy and precision.



precise but not accurate

accurate and precise

neither precise or accurate

Organize each statement into qualitative or quantitative observations based on the picture below.



QUALITATIVE
OBSERVATIONS

QUANTITATIVE
OBSERVATIONS

The tree has lots of limbs.

The deer have black spots on their tails.

I see 12 deer in the field.

There is only one buck.

The grass is really green.

There are 12 girls and 6 boys in class.