

Biology
Scientific Method Practice

Name: _____ **Period** _____

Directions: Read the passages and fill in the information beneath them.

Basic practice:

- a) Angelo wants to find out if the color of his mom's hummingbird feeder is related to the number of birds that feed from it.

Independent Variable

Dependent Variable

- b) Amy wants to know if her plants will grow bigger if they are given more fertilizer.

Independent Variable

Dependent Variable

- 1) We want to find out if the amount of time that students study is related to their quiz scores.

Question:

Hypothesis:

Control group:

Experimental group:

Constants:

Independent Variable:

Dependent Variable:

Examples of potential quantitative data:

Examples of potential qualitative data:

- 2) Michael heard that adding acetone to his gasoline would increase the gas mileage that his car gets and decides to test it.

Question:

Hypothesis:

Control group:

Experimental group:

Constants:

Independent Variable:

Dependent Variable:

Examples of potential quantitative data:

Examples of potential qualitative data:

- 3) A group of college students were given a short course in speed-reading. The instructor was curious if a monetary (money) incentive would influence performance on a reading test taken at the end of the course. Half of the students were offered \$5 dollars for obtaining a certain level of performance on the test, the other half were not offered money and were not made aware that others were.

Question:

Hypothesis:

Control group:

Experimental group:

Constants:

Independent Variable:

Dependent Variable:

Examples of potential quantitative data:

Examples of potential qualitative data: