

DEPENDANT & INDEPENDENT VARIABLES

IDENTIFY THE INDEPENDENT AND DEPENDENT VARIABLE :

1. Plants that get regular watering grow taller.
 - a) Independent variable : water
Dependent variable : plants growth.
 - b) Independent variable : smoking
Dependent variable : lung cancer
 - c) Independent variable : head start
Dependent variable : grades
 - d) The amount of chromium increased or not increased

IDENTIFY THE INDEPENDENT AND DEPENDENT VARIABLE :

2. People who smoke cigarettes have a higher incidence of lung cancer.
 - a) Independent variable: head start
Dependent variable: grades
 - b) Independent variable: water
Dependent variable: plants growth.
 - c) The amount of chromium increased or not increased
 - d) Independent variable: smoking
Dependent variable: lung cancer

IDENTIFY THE INDEPENDENT VARIABLE FOR THE HYPOTHESIS:

3. Fertilizer will increase the rate of grass growth
 - a) Special cream or no special cream
 - b) Rate of grass growth
 - c) Fertilizer or no fertilizer
 - d) Retardant or no retardant
4. Variables
 - a) all the parts of the experiment that remain the same during an experiment
 - b) factors that might change in an experiment
 - c) observation that is in numbers
 - d) test scores

IDENTIFY THE INDEPENDENT AND DEPENDENT VARIABLE :

5. At-risk children attending head start programs get better grades in reading in second grade.
 - a) Independent variable: smoking
Dependent variable: lung cancer
 - b) Independent variable: water
Dependent variable: plants growth
 - c) Independent variable: head start
Dependent variable: grades
 - d) The amount of chromium increased or not increased

6. Hypothesis
 - a) Test scores
 - b) Testable explanation of a question or problem (educated guess)
 - c) It is a process that is used to answer questions about the world
 - d) Observation that is in numbers

7. Quantitative
 - a) Rate of hair growth
 - b) Observation that is in numbers
 - c) Rate of grass growth
 - d) Test scores

8. Independent variable
- a) All the parts of the experiment that remain the same during an experiment
 - b) Independent variable: head start
Dependent variable: grades
 - c) The part of the experiment that is being changed or manipulated to see if it has an effect.
 - d) Independent variable: smoking
Dependent variable: lung cancer
9. Dependent variable
- a) The part of the experiment that you measure. It changes based on the effect of the Independent variable.
 - b) All the parts of the experiment that remain the same during an experiment
 - c) Independent variable : smoking
Dependent variable : lung cancer
 - d) Independent variable : head start
Dependent variable : grades

IDENTIFY THE **DEPENDENT VARIABLE FOR THE HYPOTHESIS:**

10. Drinking extra water before a test will improve test scores
- a) marital status
 - b) extra water or no extra water
 - c) test scores
 - d) grades

IDENTIFY THE **DEPENDENT VARIABLE FOR THE HYPOTHESIS:**

11. Fertilizer will increase the rate of grass growth
- a) Number of cavities
 - b) Rate of grass growth
 - c) Proximity of surface water
 - d) Rate of hair growth
12. Qualitative
- a) Using your senses (look, touch, smell, describe) to gather information
 - b) Observation that is in numbers
 - c) Testable explanation of a question or problem (educated guess)
 - d) Observation in the form of words

IDENTIFY THE **INDEPENDENT VARIABLE FOR THE HYPOTHESIS:**

13. Hair will grow faster if a special cream is applied
- a) Special cream or no special cream
 - b) The age of the person using the cream
 - c) The length of hair before application
 - d) The color of the cream being used
14. Observation
- a) Using your senses (look, touch, smell, describe) to gather information
 - b) Observation that is in numbers
 - c) Observation in the form of words
 - d) Testable explanation of a question or problem (educated guess)

IDENTIFY THE **DEPENDENT VARIABLE FOR THE HYPOTHESIS:**

15. Hair will grow faster if a special cream is applied
- a) size of the hair bulb
 - b) rate of hair growth
 - c) angle of the hair root
 - d) size of their hair bulb

IDENTIFY THE INDEPENDENT VARIABLE FOR THE HYPOTHESIS:

16. Drinking extra water before a test will improve test scores

- a) The time of day the test is administered
- b) The difficulty level of the test
- c) The type of test taken
- d) Extra water or no extra water

17. Scientific Method

- a) Testable explanation of a question or problem (educated guess)
- b) It is a process that is used to answer questions about the world
- c) Observation that is in numbers
- d) A procedure that will test the hypothesis

IDENTIFY THE INDEPENDENT VARIABLE FOR THE HYPOTHESIS:

18. A steel alloy will be stronger if the amount of chromium is increased

- a) Strength of the steel alloy
- b) Retardant or no retardant
- c) The amount of chromium increased or not increased
- d) The part of the experiment that you measure. It changes based on the effect of the Independent variable.

19. Example of dependent variable

- a) Independent variable: water
Dependent variable: plants growth.
- b) In an experiment, a water flea is given caffeine to see how much it increases the little booger's heart rate. Caffeine is What?
- c) It is a process that is used to answer questions about the world
- d) If one studies for a test, the grade on the test will be better. Grade is what?

20. Example of independent variable

- a) Independent variable: water
Dependent variable: plants growth.
- b) It is a process that is used to answer questions about the world
- c) In an experiment, a water flea is given caffeine to see how much it increases the little booger's heart rate. Caffeine is What?
- d) If one studies for a test, the grade on the test will be better. Grade is what?