

Table # _____

Name: _____

Date: _____

Science, period _____



Identifying Variables

Directions: Draw a line connecting each definition to the correct vocabulary word.

Something that changes each time you do an experiment

Control variable

The variable you change on purpose

Dependent variable

The variable you measure

Independent variable

A variable that always stays the same

Variable

Directions: Read each experiment description below and answer the questions that follow.

1. Smithers thinks that a special juice will increase the speed of workers stapling a set of papers. He creates two groups of 50 workers each and assigns each group to staple a set of papers. Group A is given the special juice to drink while they work. Group B is not given the special juice. After an hour, Smithers counts how many stacks of papers each group has made. Group A made 1,587 stacks, Group B made 2,113 stacks.



What question is Smithers trying to answer? _____

What is the independent variable? _____

What is the dependent variable? _____

Should Smithers give the workers the same set of papers to staple? Why or why not? _____

What are the results? _____

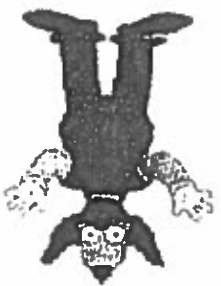
How could Krusty confirm his results?

What are the results?

What is the dependent variable?

What is the independent variable?

What question is Krusty trying to answer?



3. Krusty was told that a certain itching powder was the newest best thing on the market, it even claims to cause 50% longer lasting itches. Interested in this product, he buys the itching powder and compares it to his usual product. One test subject (A) is sprinkled with the original itching powder, and another test subject (B) was sprinkled with the Experimental itching powder. Subject A reported having itches for 30 minutes. Subject B reported to have itches for 45 minutes.

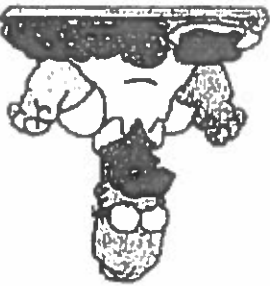
What are the results?

Should Homer spray the shower at different times each day? Why or why not?

What is the dependent variable?

What is the independent variable?

What question is Homer trying to answer?



2. Homer notices that his shower is covered in a strange green slime. His friend Barney tells him that coconut juice will get rid of the green slime. Homer decides to check this out by spraying half of the shower with coconut juice. He sprays the other half of the shower with water. After 3 days of treatment there is no change in the amount of the green slime on either side of the shower.