

Scientific Method

Steps to the Scientific Method

- Ask a Question
- Do Background Research
- Construct a Hypothesis
- Conduct an Experiment
 - Variable vs. Control
- Analyze your Data
- Communicate Your Results

Smithers thinks that a special juice will increase the productivity of workers. He creates two groups of 50 workers each and assigns each group the same task (in this case, they're supposed 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.

Identify the:

1. Control Group
2. Independent (Manipulated) Variable
3. Dependent (Responding) Variable
4. What should Smithers' conclusion be?
5. How could this experiment be improved?



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 appearance of the green slime on either side of the shower.

1. What was the initial observation?
2. Control Group
3. Independent (Manipulated) Variable
4. Dependent (Responding) Variable
5. What should Homer's conclusion be?

