## Identify the Controls and Variables

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?



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.

6. What was the iniitial observation?

Identify the-

- 7. Control Group
- 8. Independent (Manipulated) Variable
- 9. Dependent (Responding) Variable
- 10. What should Homer's conclusion be?



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 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. Identify the-

- 11. Control Group
- 12. Independent (Manipulated) Variable
- 13. Dependent (Responding) Variable
- 14. What should Bart's conclusion be?
- 15. How could Bart's experiment be improved?



Bart believes that mice exposed to radiowaves will become extra strong (maybe he's been reading too much Radioactive Man). He decides to perform this experiment by placing 10 mice near a radio for 5 hours. He compared these 10 mice to another 10 mice that had not been exposed. His test consisted of a heavy block of wood that blocked the mouse food. he found that 8 out of 10 of the radiowaved mice were able to push the block away. 7 out of 10 of the other mice were able to do the same.