Mr. 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, Mr. 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:

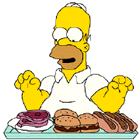
1. Control Group

2. Independent Variable

3. Dependent Variable

4. What should Mr. 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.

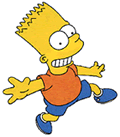
6. What was the initial observation?

7. Control Group

8. Independent Variable

9. Dependent Variable

10. What should Homer's conclusion be?

Bart believes that mice exposed to radio waves 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. Bart found that 8 out of 10 of the radio waved mice were able to push the block away. 7 out of 10 of the other mice were able to do the same.

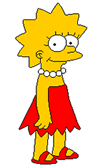
11. Control Group

12. Independent Variable

13. Dependent Variable

14. What should Bart's conclusion be?

15. How could Bart's experiment be improved?

 Lisa is working on a science project. Her task is to answer the question: "Does Rogooti (which is a commercial hair product) affect the speed of hair growth". Her family is willing to volunteer for the experiment

20. Describe how Lisa would perform this experiment. Identify the control group, and the independent and dependent variables in your description