

SIMPSON SCIENTIFIC METHOD



Smithers believes that his workers at the factory could be more productive. He thinks that a special juice will increase the productivity of

workers. He selects 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 a special juice to drink while they work. Group B is not given the special juice. After an hour, Smithers counts how many stacks of paper each group has made. Group A made 6,587 stacks, Group B made 1,113 stacks.

Identify the:

1. Hypothesis

2. Control Group

3. Experimental Group

4. Independent Variable

5. Dependent Variable

6. What should Smithers conclusion be?



Homer suddenly notices that the walls of his shower are covered in a strange green slime. His friend Barney tells him that coconut juice will get rid of the green slime. Homer

decides to test this out by spraying half of the shower with coconut juice every day. He sprays the other half of the shower with water. After 3 days of "treatment" there is no change in the amount of green slime on either side of the shower.

7. What was Homer's initial observation?

Identify the:

8. Hypothesis

9. Control Group

10. Independent Variable

11. Dependent Variable

12. What should Homer's conclusion be?



Bart believes that mice exposed to microwaves will become extra strong (maybe he's been reading too much Radioactive Man). He decides to perform an experiment by

placing 10 mice in the microwave for 10 seconds. He then compared the performance of these 10 mice to another 10 mice that had not been exposed to the microwaves. His test consisted of a heavy block of wood that blocked the mouse from food. He found that 8 out of 10 of the microwaved mice were able to push the block away to get to the food. 7 out of 10 of the non-microwaved mice did the same.

Identify the:

13. Hypothesis

14. Control Group

15. Experimental Group

16. Independent Variable

17. Dependent Variable

18. What should Bart's conclusion be?

19. What are the **ethical** considerations of this experiment?



Krusty the Clown 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) is sprinkled with the Experimental itching power. Subject A reported having itches for 30 minutes, Subject B reported to have itches for 45 minutes.

Identify the:

20. Hypothesis

21. Control Group

22. Experimental Group

23. Independent Variable

24. Dependent Variable

25. Did the claims of the new product meet the experiment outcome? Did it meet expectations?
