Read the following story:



Mr. Smithers needs to increase how much work gets done by his employees every day or he will get a demotion back to the mailroom by Mr. Burns. He has noticed that two of his employees that drink "Pitbull" juice seem to get more work done than all of the other employees every day. He thinks that this juice will increase the productivity of his workers. He creates two groups of 50 workers each and assigns each group the same task (they have to staple a set of papers). Group A is given the "Pitbull" juice to drink while they work. Group B is not given the 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. Mr. Smithers is convinced the juice increases how much work the employees get done. In order to convince Mr. Burns that he should spend the money and buy "Pitbull" for all of the workers, Mr. Smithers makes a graph showing the number of papers stapled every 5 minutes by each group of workers. He takes this into Mr. Burns and explains how the group that drank "Pitbull" out-stapled the non-Pitbull drinking group.

Match each science process skill with the statement below that demonstrates that skill.

a. observing	b. classifying	c. measuring	d. inferring
e. predicting	f. estimating	g. defining operationally	h. making models

____a___ He has noticed employees that drink "Pitbull" seem to get more done.

- ____f Mr. Smithers expects to see employees do about 35% more work with "Pitbull".
- <u>d</u> Mr. Smithers thinks if employees drink "Pitbull" and increase production, the plant will be a better place to work.
- <u>h</u> Mr. Smithers makes an example of how the stapled papers should look so the employees can staple the papers correctly.
- ____e Mr. Smithers thinks if he can increase employee production, Mr. Burns might give him a raise.
- <u>c</u> Mr. Smithers separates the employees into 2 groups of 50 people each, he gives group A 150 mL of "Pitbull" every 30 minutes.
- ____b__ Employees must sort the stapled packets into 5 groups for each department of the plant.
- ____g Mr. Smithers explains to his employees that "getting more work done" means that more papers will get stapled in a specific amount of time (1 hour).

Scientific Method - Match each statement with the step of the scientific method

a) Ask a questionb) Form a Hypothesisc) Design an experimentd) Collect datae) analyze dataf) form a conclusion

g) communicate the results

_____ He takes the graph to Mr. Burns and shows him how much work each group completed.

- ____ Mr. Smithers wants to know if drinking "Pitbull" will increase the amount of work employees do.
- <u>c</u> Mr. Smithers separates his employees into two groups and gives one group "Pitbull", one group no "Pitbull". He counts how many papers each group staples after 1 hour.
- ___f___ Mr. Smithers figures out that employees that drink "Pitbull" during the day can get more work done.
- ___e___ He makes a graph showing how many papers each group staples every 5 minutes.
- __b___ He thinks that if all employees drink "Pitbull", they will get more done every day.
- <u>d</u> Mr. Smithers counts how many papers each group has stapled every 5 minutes. At the end of 1 hour he finds that group A stapled 1,587 stacks while group B stapled 2,113 stacks.

What is wrong with Mr. Smither's conclusion? The employees that drank "Pitbull" stapled fewer packets than the ones that did not drink it.