

TRY LISTING THE PARTS OF THE FOLLOWING EXPERIMENTS:

You might have observed that light forms a rainbow when it passes through glass. You form a conclusion that the thickness of the glass may cause the colors of the rainbow. To test this you use a flashlight to shine a beam of light through a piece of window glass, and a piece of thick welder's glass. You do this, and find that in both cases you see plain white light on a piece of paper.

HYPOTHESIS:

PREDICTION:

INDEPENDENT VARIABLE:

DEPENDENT VARIABLE:

CONTROL GROUP:

EXPERIMENTAL GROUP:

CONCLUSION:

#####

Because you have done a lot of observing in your time, you think that molecules are always moving. You decide that if molecules are free to move, that is there is nothing in their way, that they will move, even if there is nothing pushing them. So you take some cheap cologne in a bottle and place it in a room. Most people don't smell anything. Then, when you take the cap off, you notice when people smell it, You would guess that people in the back would smell it after awhile, even if the air wasn't moving or no one pushed the molecules. You do this and it takes 3 minutes for the person in the back who couldn't smell it before to smell it after the cap comes off.

HYPOTHESIS:

PREDICTION:

INDEPENDENT VARIABLE:

DEPENDENT VARIABLE:

CONTROL GROUP:

EXPERIMENTAL GROUP:

CONCLUSION:

TRY LISTING THE PARTS OF THE FOLLOWING EXPERIMENTS:

You have been studying density of various objects in science class. After doing a lab, you conclude that the color of the liquid made no difference in the density. So you fill each cup of water up with 200 ml of water and two tablespoons of sugar. In one cup you put no food coloring, so it stays clear, and in each of four others you put red, blue, gold, and green food coloring. To check the density, you try and put red on top of green, green on top of red, clear on top of blue, etc.... No matter which way you do it, you find that for all 120 combinations that the liquids totally mix.

HYPOTHESIS:

PREDICTION:

INDEPENDENT VARIABLE:

DEPENDENT VARIABLE:

CONTROL GROUP:

EXPERIMENTAL GROUP:

CONCLUSION:

The teacher, being a very strange individual, thinks that students can be conditioned like the famous Pavlov dogs. The teacher rings a bell every 5 minutes, and gives two students picked at random some candy, without giving it to the rest of the class or telling them why. After several times of this really annoying behavior, the teacher does the experiment. The teacher rings the bell one last time, and then asks every student what they expect to happen. Only the two chosen students expect to get candy at that moment, although the others WANT some too. The teacher then says that those two students are now conditioned to expect candy every time they hear a bell!

HYPOTHESIS:

PREDICTION:

INDEPENDENT VARIABLE:

DEPENDENT VARIABLE:

CONTROL GROUP:

EXPERIMENTAL GROUP:

CONCLUSION: