



# HOW ABOUT THOSE BUBBLES?

M1-21

The background is a dark gray gradient. In the top-left and bottom-right corners, there are several realistic-looking bubbles of various sizes, some overlapping. The bubbles have highlights and shadows, giving them a three-dimensional appearance.

# QUESTION

- CAN ADDING CORN SYRUP OR GLYCERIN TO YOUR BUBBLE SOLUTION MAKE IT BETTER THAN STORE USED BUBBLES?

# ABSTRACT

- THIS EXPERIMENT (ARE HOME-MADE BUBBLES BETTER THAN STORE BOUGHT BUBBLES?) IS ABOUT BUBBLES AND SEE WHICH IS BETTER THE HOMEMADE BUBBLES OR THE BUBBLES AT THE STORE. THE PURPOSE OF THIS EXPERIMENT IS TOO SEE HOW THE DIFFERENT MIXTURES AT HOME AFFECT THE TIME IT LAST IN THE AIR COMPARED TO THE BUBBLES AT THE STORE. MY HYPOTHESIS IS IF I MIX GLYCERIN AND CORN SYRUP, THEN THE BUBBLE WILL LAST LONGER THAN THE STORE BOUGHT BUBBLES, BECAUSE OF CORN SYRUP AND GLYCERIN ARE THICK SUBSTANCES SO THEY ARE HARD TO POP. SO THE PROCEDURE THAT I USED IS, FIRST I WILL MAKE MY BUBBLE SOLUTION AND STORE THEM IN A CLEARLY LABELED GLASS MASON JAR AND I WILL USE ONE JAR FOR EACH SOLUTION. THEN GET A BUBBLE BLOWER AND GO OUT AND TEST EACH SOLUTION SEEING HOW LONG EACH BUBBLE LASTS. THEN I WILL REPEAT THIS STEP 20 TIMES AND PUT ALL MY DATA ON A TABLE CHART. THEN CALCULATE THE TIME TO SEE WHICH PRODUCT LASTED THE LONGEST. NOW MY CONCLUSION IS MY HYPOTHESIS WAS SUPPORTED BECAUSE AS SHOWN IN THE GRAPH ALMOST 70% OF THE TIME THE HOMEMADE BUBBLE LASTED THE LONGEST. BUT IN MY OPINION MY DATA IS NOT RELIABLE BECAUSE I WAS OUTSIDE DOING IT SO IT COULD'VE AFFECTED THE EXPERIMENT IN MANY WAYS. MY RESULTS WERE THAT GLYCERIN AND CORN SYRUP LASTED THE LONGEST THEN STORE BOUGHT BUBBLES.

# HYPOTHESIS

- I THINK THAT THE MIXTURE OF CORN SYRUP AND GLYCERIN MIXTURE WILL LAST LONGER THAN THE STORE BOUGHT BUBBLES, BECAUSE OF CORN SYRUP AND GLYCERIN ARE THICK SUBSTANCES SO THEY WOULD TAKE LONGER TO POP.

# MATERIALS

- GLYCERIN,
- CORN SYRUP
- STORE BOUGHT BUBBLES
- CUPS
- BUBBLE BLOWER
- TIMER
- EXPERIMENTAL SET

# PROCEDURE

- MAKE MY BUBBLE SOLUTION AND STORE THEM IN A CLEARLY LABELED GLASS MASON JAR AND I WILL USE ONE JAR FOR EACH SOLUTION.
- GO OUT AND TEST EACH SOLUTION SEEING HOW LONG EACH BUBBLE LASTS.
- REPEAT THIS STEP 20 TIMES AND PUT ALL MY DATA ON A TABLE CHART.
- CALCULATE THE TIME TO SEE WHICH PRODUCT LASTED THE LONGEST.

# RESULTS

MY RESULTS WERE THAT THE GLYCERIN AND CORN SYRUP SOLUTION LASTED LONGER THAN THE STORE BOUGHT BUBBLES. IT LASTED THAT LONG BECAUSE GLYCERIN AND CORN SYRUP ARE A THICKER SUBSTANCE THAN THE STORE BOUGHT BUBBLES.

# CONCLUSION

- MY HYPOTHESIS WAS SUPPORTED BECAUSE ALMOST 70% OF THE TIME THE HOMEMADE BUBBLE LASTED THE LONGEST. BUT IN MY OPINION MY DATA IS NOT RELIABLE BECAUSE I WAS OUTSIDE DOING IT SO IT COULD'VE AFFECTED THE EXPERIMENT IN MANY WAYS.



# WORK CITED

- [HTTP://NCES.ED.GOV/NCESKIDS/CREATEAGRAPH/](http://nces.ed.gov/nceskids/createagraph/)
- [HTTP://WWW.MILLERSOAP.COM/GLYCERIN.HTML](http://www.millersoap.com/glycerin.html)
- “RULES FOR ALL PROJECTS.” STUDENT SCIENCE N.P., N.D. WEB., 25 AUG. 2015,
- [HTTP://STUDENT.SOCIETYFORSCIENCE.ORG/RULES-ALL-PROJECTS.](http://student.societyforscience.org/rules-all-projects)