SAMPLE SCIENCE FAIR PROJECT

TITLE: Bubbles! Bubbles! Bubbles!

PURPOSE: What can I add to bubbles to make them last longer?

HYPOTHESIS: I think if I add glycerin to the bubbles it will make the bubbles last longer because glycerin helps the water keep in moisture.

MATERIALS: Water
Dawn Dish Soap
Glycerin
Karo Syrup
Sugar
4 Containers
4 Bubble Wands
Measuring Cup
Measuring Spoons
Stopwatch

PROCEDURE:
1. Make 4 containers of plain bubbles with water and Dawn dishwashing soap
   - Measure 1 cup of water
   - Measure 1 tablespoon of Dawn dishwashing soap
   - Mix them together
2. In one container, mix in 1 teaspoon of glycerin
3. In one container, mix in 1 teaspoon of Karo syrup
4. In one container, mix in 1 teaspoon of sugar
5. Leave one container plain for the control
6. Blow 10 of each kind of bubble and record on a chart.
7. Compare all of the different types of bubbles.
8. Determine which kind of bubbles last the longest.
OBSERVATIONS:
The plain bubbles popped quickly if you moved them but when you add glycerin or Karo syrup they bounce on the wand but don’t pop. I noticed that if you blow the bubbles slower, they get bigger. The bubbles were easy to catch on the wand. On some of the bubbles, I noticed that some of the bubbles had rainbows on them and if there was more than one bubble stuck together, there was a flat wall in between them.

RESULTS:

![Graph showing the duration of different types of bubbles](image)

CONCLUSION:
When I add glycerin to bubbles, it makes them last longer. Glycerin helps seal in moisture. It was very thick. Bubbles last longer when they land on something wet. They will pop when it is very dry outside or they touch something dry. The bubbles made with glycerin kept more moisture in them and that is why they lasted longer.