

# Glue-Ball Laboratory: Felix Muhiga

## Students' Guide

### Goals

- To introduce chemical change and the reactivity of matter
- To practice observation skills in the laboratory

### The Activity

In this activity, you will use white glue and soap to create a new substance—a glue-ball. You will experience chemical reactivity and investigate the properties of the new material formed, by observation.

### Materials for Each Group

- Safety goggles
- 4% borax solution (sodium borate)
- 55% Elmer's glue solution in water
- Ziplock sandwich bags

### SAFETY

Make sure that you wear safety goggles at all times during the laboratory.

Make sure that you zip the bags to prevent spills.

This activity requires no other special safety precautions. It can be done on the bench, with no additional ventilation.

### Instructions

Squirt some white glue into a ziplock bag.

Add some borax solution to the bag.

Zip the bag to prevent spills, and mold the substance in the bag with your hands.

What are the physical changes that you observe? \_\_\_\_\_

---

---

---

When a white material is formed, take it out of the bag, observe it, and list its properties: \_\_\_\_\_

---

---

---

## Glue-Ball Laboratory: Students' Guide, page 2

---

Compare the properties of your own glue-ball with your friends' glue-balls and list them in the table below.

Properties of My Glue-Ball	Properties of Other Glue-Balls

Why do you think that you have variations in the properties of the glue-balls? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Summary

What substances did you use? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What did you get from their mixing? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What do you call this change of matter? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_