

# [Experiment in organic chemistry assignment](https://assignbuster.com/experiment-in-organic-chemistry-assignment/)

They form into long and flexible chains. Polymers are found in plastics, fiberglass, and many more product manufacturer. Polymers are amorphous solids- meaning they have no definite shape and they can from into different shapes and not take place of a shape. In our experiment we produced putty using only glue, food coloring and borax solution because of the glue and food coloring solution mixed with the borax solution thus making the liquid mixture, solid. The properties of the putty have a gummy feature and can be mold into shapes. The less the borax the less gummy is the putty.

The more the borax the more gummy is the putty. II. Intro: (Merely) Polymers are large molecules composed of many salary smaller molecules linked together. The individual smaller molecules are called monomers. When small organic molecules are joined together, giant molecules are produced. Humans have taken and gums. Unmatched in the diversity of their properties, polymers such as cotton, wool, rubber, and all plastics are used in nearly every industry. Natural and synthetic polymers can be produced with a wide range of stiffness, strength, heat resistance, and density.

Natural polymers include cellulose and starch (found in the cell wall and the cajole of plants respectively), chitin (exoskeleton of arthropods), and DNA (genetic material). Synthetic polymers include plastics, polystyrene and the material you will produce in this activity. Ill. Methodology: (Pearl) We measured 45 ml of white glue into a 250 ml beaker and added a 45 ml of warm water and a few drops of food coloring into the beaker. At the same time, we measured 15 grams of solid borax using a balance beam and put it in another 250 ml beaker. We added 60 ml of warm water to the borax and stirred the solution thoroughly for about two minutes.

After we prepared the borax solution we added this to the glue mixture and stirred thoroughly until the mixture became sticky and jelly-like. We removed the putty from the beaker and record our observations. We repeat the experiment but this time, we used a 50% more glue or about 68 ml of glue and 20% less borax or about 12 grams of borax solution. Then, we recorded our observations. We repeated the same experiment, but instead of using 50% more glue, we made it into 50% less glue and 20% more borax solution. Afterwards, we experimented with the putty and recorded our observations.

After we used the putty, we disposed the material. ‘ V. Result: Dude) A clay-like mixture has been made out of glue and borax; hence, it is called putty. At the first of the experiment, the borax and the glue completely combine and created Putty, its properties is similar to clay that can be mold but is much softer compared to it. At the second experiment (where we use 50% more glue and 20% less borax), it still do create a putty but not all the borax solution mixed. At the third experiment (we use 50% less glue and 20% more borax), it has still the same result in the 2nd experiment we did. V.

Discussion: Dude) Since the glue has acetic acid, the BOB groups from the borax removes the acetic the 1st, 2nd and 3rd experiment we observe changes in terms of the mixtures. In the 1st experiment, the borax and the glue combine with no residue. The putty that has been produce after the mixing is firm. While in the 2nd experiment, there is borax residue. The putty that has been produce after the mixing is the softest. While in the 3rd experiment, same as the 2nd experiment where there is still a borax residue. And the putty that has been produce after the mixing is soft but small. VI. Conclusion: (Gaga)