Objective

By the end of this lesson, the student will understand the basic principles of chemistry by exploring the concept of Elmer's squishies.

Materials and Prep

- Elmer's Glue
- Food coloring
- Baking soda
- Contact lens solution
- Ziplock bags
- Disposable cups
- A mixing spoon
- Plastic gloves (optional)
- Protective table covering (optional)

Make sure to read through the activity instructions and understand the steps before beginning the lesson.

Activities

- 1. Create a basic slime mixture:
 - $\circ\,$ Start by pouring a bottle of Elmer's Glue into a disposable cup.
 - $\circ\,$ Add a few drops of food coloring to the glue and mix well.
 - $\circ\,$ Sprinkle in a small amount of baking soda and stir until combined.
 - Slowly add contact lens solution while stirring until the slime starts to form and pull away from the sides of the cup.
 - $\circ\,$ Knead the slime with your hands until it becomes less sticky and more stretchy.
- 2. Create different textures of squishies:
 - Divide the slime mixture into separate Ziplock bags.
 - $\circ\,$ Add different amounts of baking soda to each bag to create squishies with varying textures.
 - $\circ\,$ Knead the bags to distribute the baking soda evenly.
- 3. Explore the properties of squishies:
 - $\circ\,$ Squeeze and stretch the squishies to observe their different textures.
 - $\circ\,$ Discuss with the student how the amount of baking soda affects the squishy's texture.
 - Encourage the student to experiment with different amounts of baking soda to create their desired texture.

Fourth Grade Talking Points

- "Chemistry is the branch of science that deals with the properties, composition, and behavior of matter."
- "Matter is anything that takes up space and has mass. Everything around us is made up of matter, including the squishies we are making."
- "Elmer's Glue is a polymer, which is a type of material made up of long chains of molecules. When we mix the glue with other ingredients, we create a new substance with different properties."

- "Food coloring is used to add color to our squishies. It helps make them more visually appealing and fun to play with."
- "Baking soda is a common household ingredient that reacts with the other materials in the slime mixture. It helps give the squishies their unique texture."
- "Contact lens solution contains an ingredient called borate, which helps to create the chemical reaction that turns our slime mixture into a squishy substance."
- "By experimenting with different amounts of baking soda, we can control the texture of our squishies. More baking soda makes them firmer, while less baking soda makes them softer."