Objective

By the end of this lesson, the student will understand the science behind slime, including its properties and how different ingredients affect its texture and consistency. The student will also create their own unique slime, applying what they've learned about ratios and reactions.

Materials and Prep

- Glue (white or clear)
- Baking soda
- Contact lens solution (contains boric acid)
- Food coloring (optional)
- Mixing bowl
- Stirring stick or spoon
- Measuring cups and spoons

Before starting the lesson, ensure that the workspace is clean and that all materials are gathered. It's helpful to have a few recipes ready for different types of slime to experiment with.

Activities

- **Slime Recipe Exploration:** Start by exploring different slime recipes. The student can choose to make a basic slime, fluffy slime, or glitter slime. Discuss the role of each ingredient in the slime-making process.
- **Texture Experimentation:** After making a basic slime, the student can experiment with adding different ingredients like shaving cream, foam beads, or glitter to change the texture and appearance of the slime.
- **Slime Science Discussion:** Engage in a discussion about the science of polymers and how slime is classified as a non-Newtonian fluid. This can include a simple explanation of viscosity and how it changes under stress.
- **Creative Slime Challenge:** Challenge the student to create a themed slime (e.g., holiday slime, color-changing slime) using the knowledge they've gained. They can present their creation and explain the science behind it.

Talking Points

- "Did you know that slime is actually a polymer? Polymers are long chains of molecules that can stretch and bend!"
- "When we mix glue and baking soda, we are creating a reaction that changes the properties of the glue, making it thicker and more viscous!"
- "Adding contact lens solution is crucial because it contains boric acid, which helps to bind the slime together and gives it that stretchy quality!"
- "What happens if we add too much baking soda? Let's find out! It could make our slime too stiff!"
- "Slime can be classified as a non-Newtonian fluid, which means its viscosity changes under stress. Isn't that cool?"
- "Have you ever thought about how we can change the slime's properties just by altering the ratios of our ingredients? It's all about experimentation!"