GRADE LEVELS: K- 3rd

Time Allotment: 45 Minutes

Slime Extravaganza

Learning Objectives:

- Students will create slime and explore its properties (texture, stretchiness).
- Students will identify the basic steps of a scientific experiment (mixing, observing).
- Students will be introduced to the concept of a chemical reaction.

Vocabulary:

- **Matter:** Anything that takes up space and has mass (like slime!).
- **Texture:** How something feels (smooth, rough, sticky).
- **Stretchy:** Can be pulled and extended without breaking (like slime!).
- **Mix:** Combining things together.
- **Chemical Reaction:** When ingredients mix and change into something new (like slime!).

Materials:

- Slime Classroom Kit (cups, Beaker, Polyvinyl Alcohol (PVA), Borax solution, and stirring sticks) • Safety goggles (optional, for older students)
- Paper towels
- Newspaper or plastic sheet (to protect work surfaces)

Procedure:

Introduction (10-15 minutes):

1. **Slime Science.** Briefly explain, in a way appropriate for their grade level. An example:

We make slime by mixing two special liquids together. One is PVA , like the glue we use at school, and the other is a solution made with Borax, a white powder from the ground containing boron, sodium, oxygen, and water. When we mix these liquids, they react and create slime, which is like magic chemistry happening right before our eyes! The Borax helps the PVA molecules stick together in a unique way, giving the slime its stretchy and gooey texture.

2. **Science Words!** Introduce the vocabulary words for today's activity (matter, texture, stretchy, mix, chemical reaction) using age-appropriate definitions and examples. For younger students, focus on 2-3 key words like "texture" and "stretchy".

3. **Slime Experiment!** Briefly explain that students will be scientists today and conduct an experiment to make slime!

Step-by-step Slime Making (10-15 minutes):

1. Safety First: Emphasize the importance of following instructions and using materials safely.

2. Prepare Your Workspace: Provide each student with a cup with a lid for their slime and a stirring stick.

3. Measure Accurately: Show students how to use a beaker for precise measurements. Explain that exact measurements are crucial because too much or too little of an ingredient can alter the results. Carefully measure and pour 25 milliliters (mL) of PVA into each student's cup.

4. Add the Magic Ingredient: Add 5 mL of borax to the PVA in each student's cup. As you do this, explain that borax is a special ingredient that helps create slime.

5. Mix Thoroughly: Instruct students to stir the mixture slowly with their stirring sticks as soon as the PVA and borax are combined. Encourage them to observe the changes in the mixture as they stir. The mixture may start out cloudy and liquid but will gradually become thicker and more solid.

6. Form the Slime: Continue stirring until the mixture forms a solid mass that pulls away from the sides of the cup.

Notes:

- Precise measurement of ingredients is essential for successful slime making.
- A classroom kit will make 33 1-ounce cups of slime.

Slime Exploration (10 minutes):

1. Touch Time! (For older students) Briefly discuss proper hand hygiene before handling the slime. Distribute safety goggles (optional) and have students carefully remove their slime from the cups.

2. Let's Play! Encourage students to explore the properties of their slime using their senses. Ask them to describe its texture (sticky, smooth), how it feels when stretched, and if they can roll it into a ball.

3. Science Chat: Gather students back together and discuss their observations. Use age-appropriate questions like: "What words can we use to describe the slime?" or "How did the slime change when you played with it?"

4. Other results to observe: If pulled slowly, it flows; if pulled quickly, it breaks; and if rolled into a ball, it bounces.